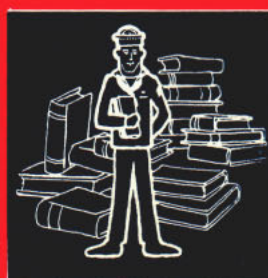
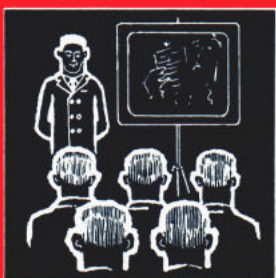
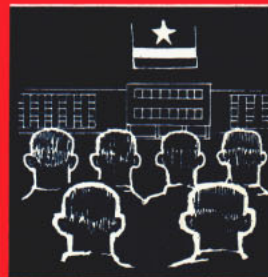


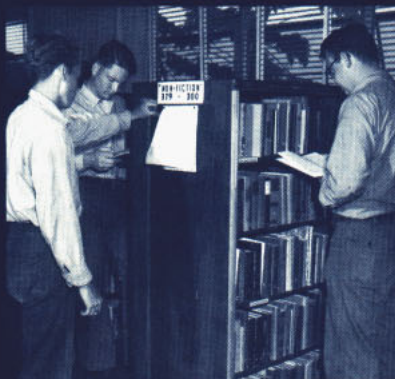
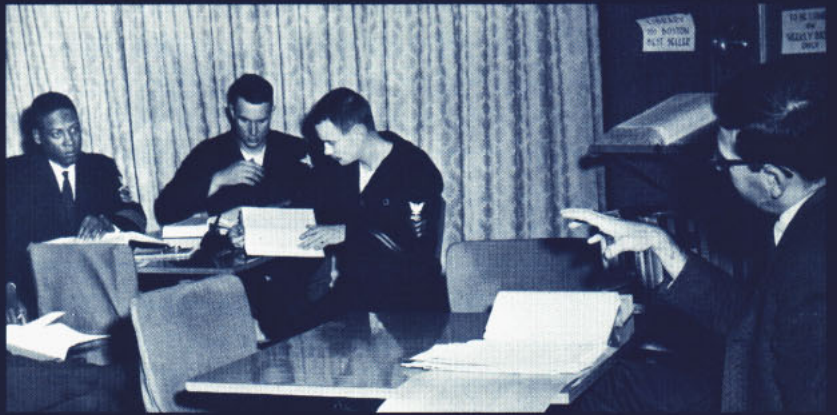
★ ALL HANDS ★

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION



Special Issue
EDUCATIONAL
OPPORTUNITIES
IN THE NAVY

DECEMBER 1967





ALL HANDS

The Bureau of Naval Personnel Career Publication, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Issuance of this publication approved in accordance with Department of the Navy Publications and Printing Regulations, NAVEXOS P-35. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles and information of general interest may be forwarded addressed to the Editor, ALL HANDS, Pers G15, BuPers, Navy Department, Washington, D.C. 20370 (see page 64). DISTRIBUTION: By Section B-3203 of the Bureau of Naval Personnel Manual, the Bureau directs that appropriate steps be taken to insure distribution on the basis of one copy for each 10 officers and enlisted personnel.

The Bureau invites requests for additional copies as necessary to comply with the basic directives.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant U.S. Marine Corps. Requests from Marine Activities should be addressed to the Commandant. PERSONAL COPIES: This magazine is for sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The rate for ALL HANDS is 25 cents per copy; subscription price \$2.50 a year, domestic (including FPO and APO address for overseas mail); \$3.50 foreign. Remittances should be made to the Superintendent of Documents. Subscriptions are accepted for one, two or three years.



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

DECEMBER 1967

Nav-Pers-O

NUMBER 611

VICE ADMIRAL BENEDICT J. SEMMES, Jr., USN

The Chief of Naval Personnel

REAR ADMIRAL BERNARD M. STREAN, USN

The Deputy Chief of Naval Personnel

CAPTAIN JAMES G. ANDREWS, USN

Assistant Chief for Morale Services

TABLE OF CONTENTS

Special Issue: Educational Opportunities in the Navy

The A, B, C's of Navy Knowledge: BuPers and Functional Schools	2
Sea School—A Sampling	5
Here's How to Be a STAR in the Navy	6
PACE-Setters—Navy's Floating Colleges	8
NESEP: A Scientific Education	10
Learn a Language—On-the-Job	14
Instructors for Hire	17
GED—What Do You Know?	17
Junior College, Via ADCOP	18
Financing Your Education: Tuition Aid and the Cold War G.I. Bill	19
Enlisted Correspondence Courses—Self-Study Program	22
USAFI At Your Service	24
Have You Checked the SCORE Program?	25
Books: For Pleasure and Knowledge	28
The Great Opportunity: The Naval Academy	30
NROTC: College and a Commission	40
Correspondence Courses for Naval Officers	43
OCS: School for New Naval Officers	46
NPGS: Postgraduate School	49
The Naval War College	52
Additional Opportunities for Senior Officers—'Think Tanks'	58
Naval Officers Study in Foreign Institutions	61
Where to Look for Information on Education	61

Centerspread: Pictorial Feature

Educational Opportunities for Enlisted Men and Officers	32
---	----

Taffrail Talk

64

John A. Oudine, Editor

Associate Editors

G. Vern Blasdel, News

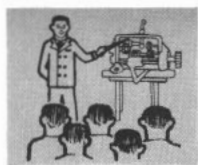
Don Addor, Layout & Art

Ann Hanabury, Research

Gerald Wolff, Reserve

• FRONT COVER: NAVY EDUCATION—ALL HANDS artists used this month's cover to depict some of the educational opportunities in the Navy. All are explained on the following pages of this special issue. (TOP ROW, LEFT TO RIGHT) On-the-job training; Navy Vocational Training Schools; Navy Training Manuals; STAR program; and SCORE. (SECOND ROW) Navy Correspondence Courses; Evaluation of Service Experience; USAFI; Language Study; and Instructor Hire. (THIRD ROW) Naval Prep School; Naval Academy; NESEP; NROTC; Officer Candidate School. (FOURTH ROW) AOC; PACE program; Tuition Aid; ADCOP; Undergraduate Education program. (FIFTH ROW) Officer Degree Completion program; Postgraduate School; Naval War College; the Cold War GI Bill; and Library Services.

• CREDIT: All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.



LEARNING—A Navyman's training is a full-time project giving him knowledge of his field.

The A, B, C's of Navy

THE MAN who succeeds today in the Navy must have a thorough knowledge of his basic duties and of his specialty.

How does he achieve this?

Through planned training, both formal and on-the-job—that's the story in a nutshell.

The formal phase, the ABCs so to speak, is conducted for enlisted personnel at the Navy's Service School Commands and other training centers such as the Fleet Training Center, San Diego. The on-the-job training, as a rule, is received and applied between and after the formal sessions.

In other words, a man's training in the Navy is a full-time project, one which is in effect every hour of every day of every week of every month of every year he is on active duty.

This chain of training actually begins in basic training where the foundation is laid for his Navy career, no matter how long it may last. It is from the Naval Training Centers that more than 50 per cent of all prospective students are earmarked for specialty training in Class "A" schools.

BuPers-controlled Class "A" schools receive about

40,000 students, while aviation Class "A" schools receive nearly 14,000 and medical Class "A" schools log in more than 10,000.

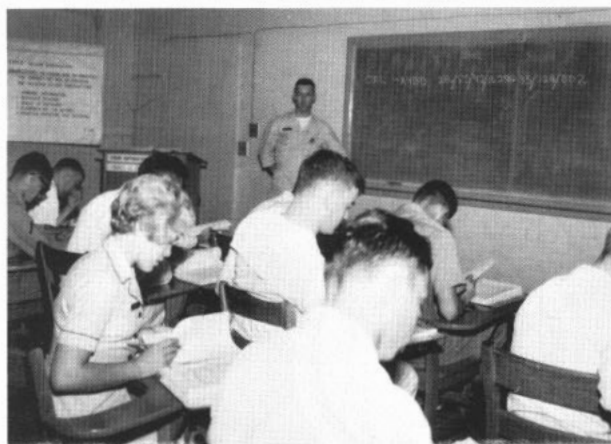
The remaining 40,000 recruits of the average 104,000 annual enlistees are sent directly to the operating forces afloat and ashore where they are geared into the rating programs by on-the-job training.

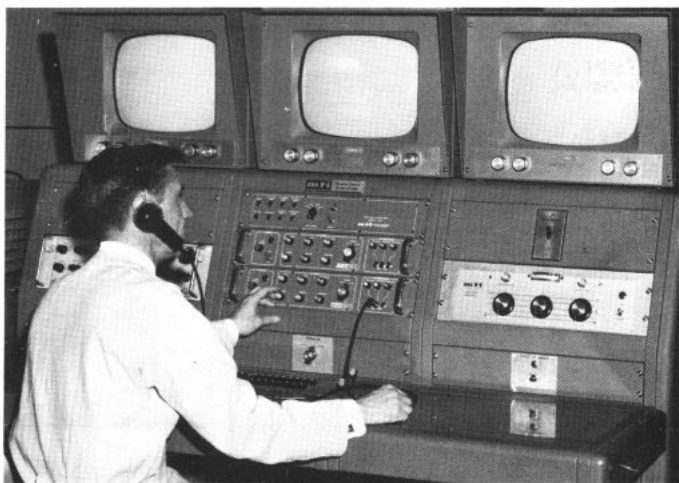
BuPers Class "A" schools—there are 56 in session today—range in length from five to 38 weeks. For instance, the Postal Clerk schools located in both Bainbridge, Md., and San Diego run five weeks in duration, whereas the Electronics Technician schools located in Great Lakes and on Treasure Island have 38-week curricula.

When an individual has graduated from Class "A" school and, as a rule, has spent some time on the job, he may seek more technical knowledge of his specialty through advanced training, primarily through Class "B" and "C" schools.

THERE ARE 23 BuPers Class "B" schools in existence which offer from seven to 46 weeks of advanced train-

ALL EYES are on landing gear during a class in aviation "A" school. Rt: Aviation weather students get word.





TV TEACHER—TV technician monitors lesson at DT school. Rt: Students work at shipfitters' school, NTC, San Diego.



Knowledge

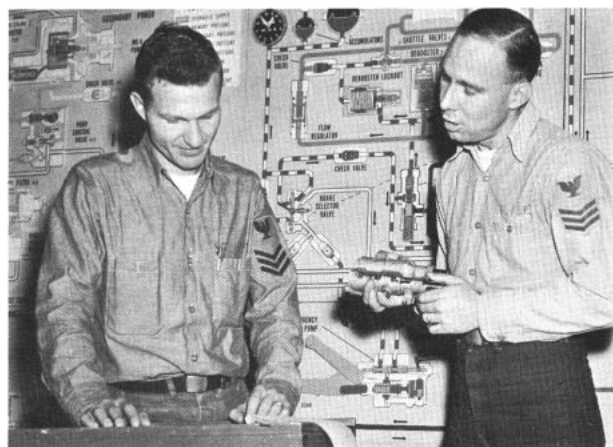
ing to about 5000 individuals each year. Career petty officers attending these advanced schools are able to keep abreast of the technological advancements introduced to the Fleet almost daily. In addition, they are afforded an opportunity to gain broader knowledge of their responsibilities as leaders in their chosen field.

Further emphasis is placed on specialized training through the last alphabetical school, Class "C."

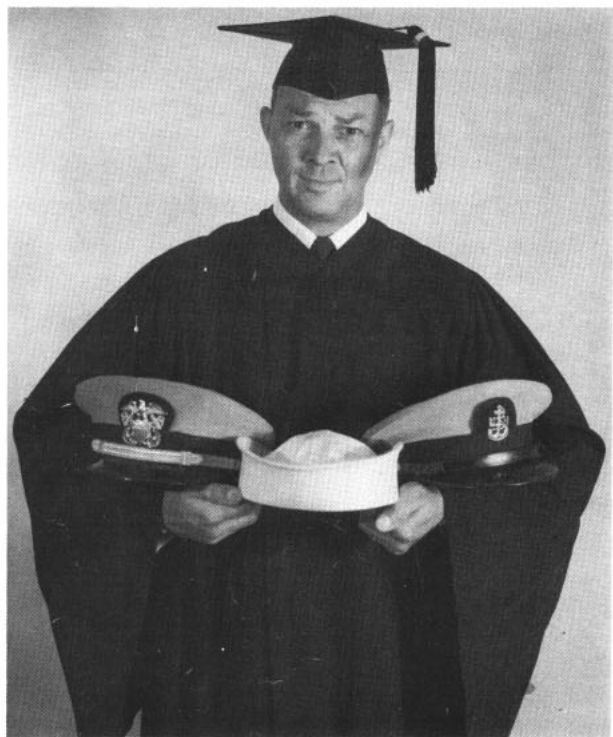
Ranging in length from one to 38 weeks, these schools—there are 26 of them—provide for the individual receiving specialized training on particular equipment, such as air-conditioning and refrigeration or motion picture projectors. About 22,000 Navymen receive Class C training each year.

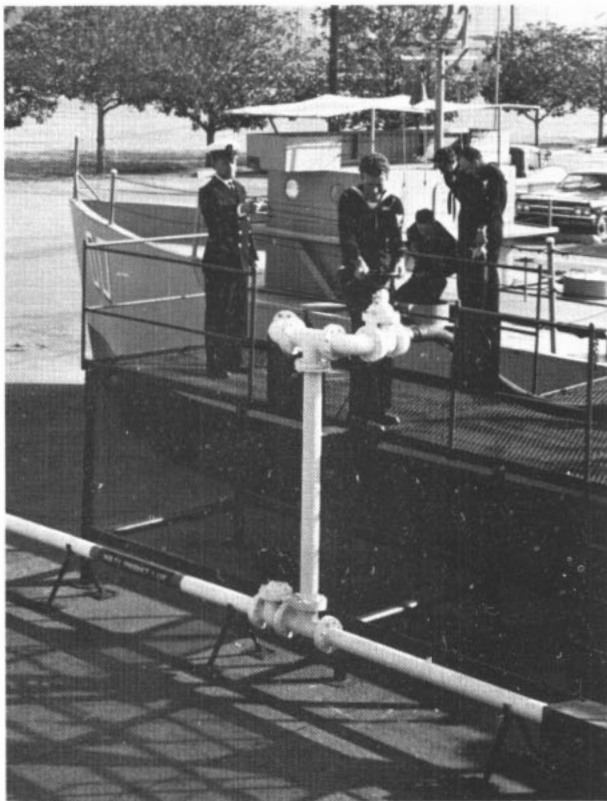
While ABC schools help to establish an individual's technical foundation, the Fleet's functional schools, directly under control of BuPers, provide for group and team training for nearly 32,000 Navymen annually. There are 14 of these functional schools, five of which are concerned with nuclear power, four with weaponry, three with underwater operations (such as swimming and deep-sea diving and salvage), and two with damage control.

STITCH IN TIME—Damage control students shore bulkhead at Fleet Training Center, Newport, R. I.

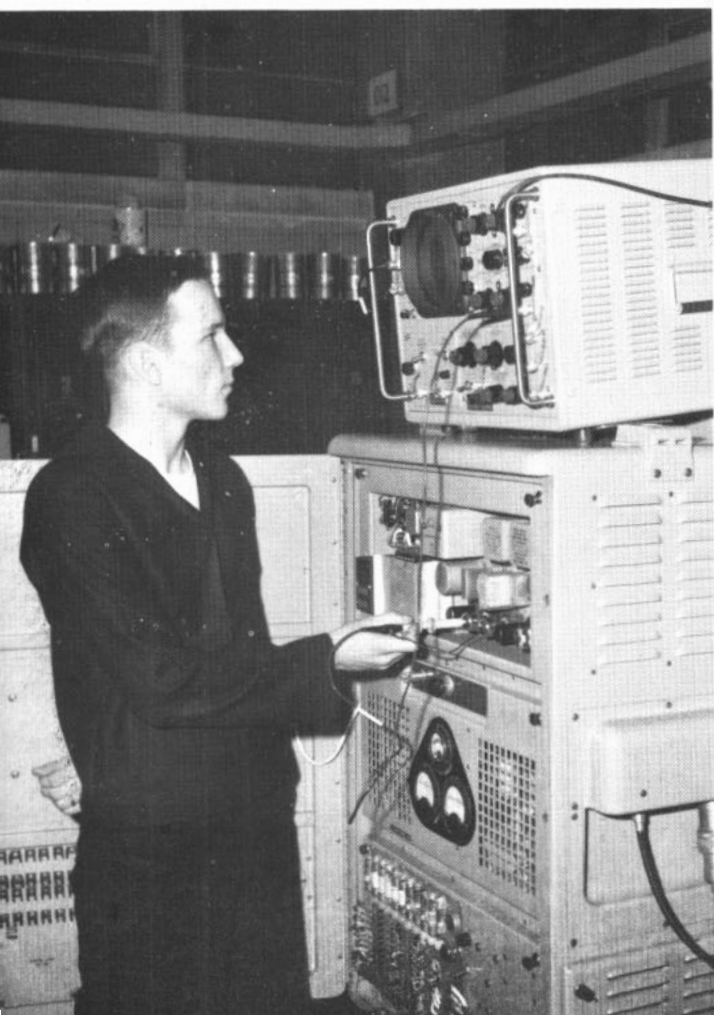


MAN OF HATS—LT R. Krueger used perseverance as he changed hats moving up the Navy advancement ladder.





MANY SUBJECTS—Navy schools teach many skills. Pictured here are Navy students learning fuel handling, air traffic control and radar techniques.



Group or team instruction is also a function of the Fleet Schools which provide precommissioning and refresher training for ships' crews at 19 facilities. These facilities, under the control of the Fleet Commanders, have an annual turnover of 152,000 trainees.

ALL OF THESE SCHOOLS—the ABCs, Functional and Fleet—help the individual to become a strong link in the Navy's chain of sea power. But the process of learning does not end in the classroom. Nor should it. For what has been taught must be applied to practical use if it is to be of any value either to the individual or to the Navy. Therefore, an important follow-through to ABC, Functional and Fleet schooling is on-the-job training.

This type training is usually completed through self-study training courses, both Navy and civilian correspondence courses, and other off-duty training such as that offered through USAFI and tuition aid. It might well be referred to as the root of all Navy training, especially for the individual preparing himself for advancement in rate. Many Navymen—in fact the 40,000 individuals who yearly go directly to the Fleet from basic training—must rely primarily on on-the-job training to learn a specialty and to prepare for promotion.

In certain instances, particularly for the seven ratings which have no Class "A" school—SM, LI, BM, QM, DC, CS and SH—on-the-job training is the sole basic source of schooling for those individuals striking for these occupations.

For the most part, however, there are at least 140 activities spread throughout the Navy which train more than 350,000 enlisted men annually. As a rule, all it takes for a man to succeed in the Navy is to take advantage of all the ABCs of naval schooling available to him.



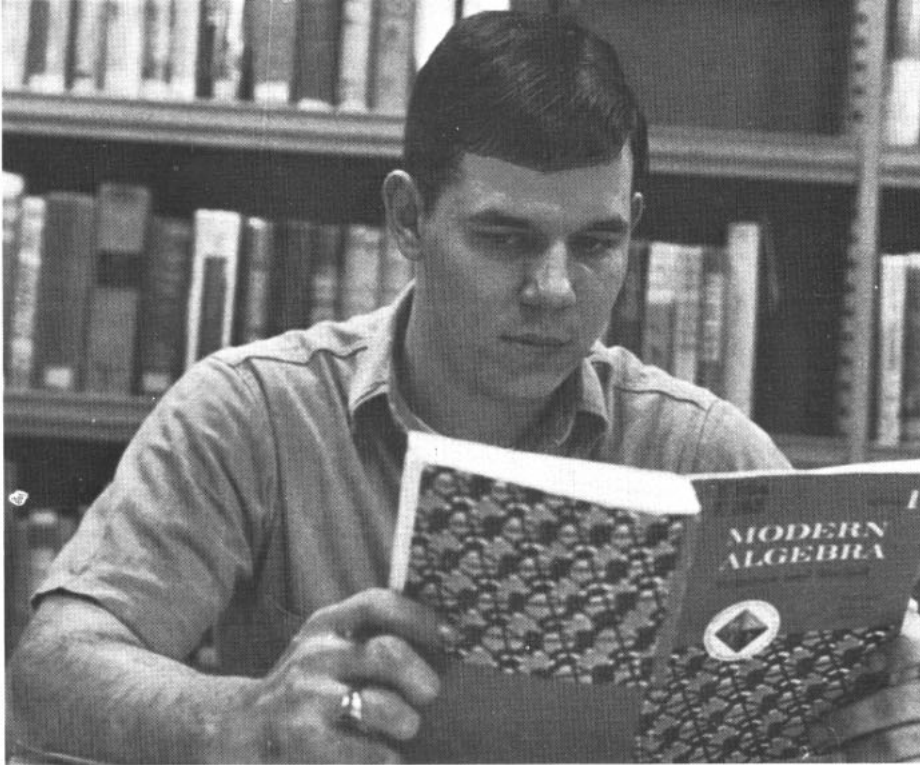
ALL HANDS

ALTHOUGH THE traditional halls of ivy and shapely coeds are missing from the scene, the school campus has come to the Tonkin Gulf on board *uss Constellation* (CVA 64).

With courses available which span almost everything from liberal arts to the highly technical standard Navy courses, many of the crew are taking advantage of the ship's educational program conducted by the carrier's Educational Services Office.

Despite long working hours—which normally average 12 hours a day, seven days a week, for long periods of time—officers and men are finding the off-duty educational program a distinct benefit during the rare lulls while on the line off the Vietnam coast.

Since deployment to the Western Pacific in May, nearly 300 high school and college course applications have been processed by the Educational Services Office. Mean-



Sea School—A Sampling

while, 129 high school GED exams and 18 Comprehensive College Tests (first-year college level) have been administered. Also, since the first of May, 54 sailors have received their GED high school diplomas through the efforts of USAFI and ESO.

Were it not for the busy typewriters, personnel counseling sessions and issuance of courses during any period of the office's regular 17-hour workday, Educational Services would resemble the interior of a small, shore-based library.

While USAFI administration constitutes a large segment of ESO's day-to-day operation, other items such as personnel counseling, school assignment quota processing, standard Navy course issues and the semi-annual administration of service-wide examinations constitute an important part of ESO's activity.

ESO also maintains a complete film library containing general military training and professional training films which are checked out to divisions on a regular basis.

Processing requests for Navy service schools is another part of ESO's service. Since deployment, more than 2000 post-deployment service school quotas have been assigned to

Connie crewmembers, while another 1000 requests for school are in the mill. This means that, once the carrier returns to Stateside, almost half her crew will be attending schools at one time or another during that time.

For men striking for various ratings, ESO carries standard NavPers correspondence courses for 54 ratings, in addition to 18 general course textbooks. Two enlisted counselors help the men to select rates according to aptitude tests and help others to apply for high school or college correspondence courses.

The ESO staff consists of one officer—an ensign—plus two personnelmen and four seamen. All have had college training ranging from two to three and one-half years.

Perhaps the highlight of *Constellation's* off-duty educational program is the on-board stocking of some 50 USAFI correspondence courses.

Each course is a complete package containing everything the student will need in completing his course, including textbook, assignment sheets, study guides, case studies for some courses and envelopes.

Initial enrollment in a USAFI course costs only \$5.00 and the student pays no fees for subsequent enrollments if he maintains a satisfactory record.

Another feature of USAFI's correspondence program is the Participating College and University Program. At present, 46 leading colleges and universities, through USAFI, offer more than 6000 courses ranging from accounting to zoology.

This program is similar to the regular USAFI course program. The student selects the college and course he wants and makes application through USAFI.

Even though this floating classroom is far removed from the academic environs on the U. S. mainland, *Constellation* sailors still have an opportunity to continue their education while doing a job for their country in Southeast Asia.

—Jim Ferrell, JOC, USN.





HERE'S HOW TO BE

SEVEN YEARS AGO the Navy inaugurated its Selective Training And Retention (STAR) Program, offering first-term enlistees the opportunity of launching a well planned naval career.

Since then, more than 27,000 individuals have benefited from the program's schooling, promotion and financial guarantees.

The program's aim is to increase the staying power of Navymen trained to service and operate the Navy's highly technical weapons systems. But such "staying power" calls for bargaining power, so the Navy offers an attractive package deal—containing basic and advanced schooling, automatic promotion opportunities and various bonuses in exchange for six-year reenlistment contracts.

Of course specific conditions must be met by the individual for him to become eligible for the program.

Basically, an applicant must have at least one year of active service but not more than 42 months' active duty if serving in pay grade E-5. And he may be in any rating, although the STAR program is designed to encourage electronics-oriented ratings to reenlist.

Equivalent "B" Schools for Automatic Advancement to Pay Grade E-5 Functional FBM—SSBN Training

Rating	Course	Length (in weeks)
ET	SINS Technician	29
ET	Navigational data technician	29
ET	Navigational aids technician	29
FT	MK-80 FCS technician	33
FT	MK-84 FCS technician	39
MT	Polaris MT C-1	33
MT	Polaris MT C-2	33
MT	Polaris MT C-3	33
TM	Polaris Ordnance and Launch (must complete or have completed Basic Undersea Weapons Circuitry to qualify for automatic advancement.)	8-11
TM	Advanced Undersea Weapons Circuits (AUWC)—12 weeks, followed by a Class C torpedo maintenance course, eight to 11 weeks.	20-23
RM	Special radio courses (RM to qualify must have completed at least 10 weeks of special training necessary for them to perform their duties on board an SSBN. Examples: WRT4, BRR3, UR32, CRF, TT Repair.)	10
MM/EN	Special Engineering Courses (Non-nuclear trained MM/EN who must complete at least 12 weeks of training in order to qualify them for duty on board an SSBN. Examples: lithium bromide, air-conditioning, CO ₂ scrubbers, O ₂ generator, atmosphere analyzer.)	10
QM	SSBN system navigation	6
FT	MK 113 MOD 2	24
FT	MK 113 MOD 5	16
FT	MK 112 MOD 2	12

Nuclear Power Training

Nuclear Power Training	1 year
------------------------	--------

Note: Successful completion of Functional FBM—SSBN or Nuclear Power Training as reflected above is considered an equivalent "B" school for automatic advancement from pay grade E-4 to E-5 upon reenlistment under the provisions of the STAR instruction.

For Navymen in pay grade E-3, the program offers a reenlistment bonus and a guaranteed assignment to Class "A" school with automatic advancement to pay grade E-4 for those who are eligible upon graduation. Also, if they are eligible, STARs receive proficiency pay and a variable reenlistment bonus.

NAVYMEN who are advanced to pay grade E-4 as a result of an exam before their STAR reenlistment may request Class "B" school. The applicants who can handle the school's advanced courses will probably become students. In any event, their request for Class "B" school will be honored after they have served in pay grade E-4 for 12 to 24 months.

Those reenlisting in pay grade E-4 may request assignment to a Class "A" school instead of the more advanced Class "B" school if they haven't previously had Class "A" training in their rating.

Class "B," "C" or an equivalent "B" school is guaranteed those who reenlist in the STAR Program in pay grade E-4 or E-5.

School entrance requirements will be waived for

Commanding officers are authorized to advance personnel in this category to pay grade E-5 as of a current date, citing BuPers Inst 1133.13C C11-1 as authority. Retroactive advancements are not authorized.

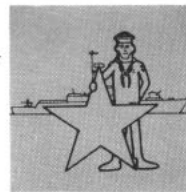
Although the Functional FBM—SSBN courses cannot be guaranteed under the STAR Program, they may be obtained through the Polaris Program or the Nuclear Power Program.

Equivalent "B" Schools for FTs and GMs

Rating	NEC	Course	Length (in weeks)
FTM	1163	AN/SP6 49B Talos Radar	24
FTM	1161/1186	AN/SPW 2B Talos Radar/MK-11 1 Talos Computer	26
FTM	1119	Talos WDS MK 6	20
FTM	1143	Talos Missile and Test Equipment	23
FTM	1164	AN/SPG 51 B Tartar Radar	24
FTM	1184	MK 118 Tartar Computer	20
FTM	1113	Tartar WDS MK 4	20
FTM	1144	Tartar/Terrier Missile and Test Equipment	23
FTM	1165	AN/SPG 55 A or 55 B Terrier Radar	30
FTM	1162	AN/SPQ 5 A Terrier Radar	24
FTM	1182	MK 100-2 Terrier Computer	20
FTM	1185	MK 119-0/3/4 Terrier Computer	20
FTM	1118	Terrier WDS MK 7	20
FTM	1133/1135	AN/SP5 39/39A Radar	20
FTM	1169	AN/SP5 48 Radar	31
FTM	1137	AN/SP5 52 Radar	28
FTG	1128	GFCs MK 68	20
FTG	1123/1117	GFCs MK 37/TDS MK 5	23
FTG	1126/1117	MK 56 GFCs/TDS MK 5	20
GMM	0998	Talos GMLS MK 12	24
GMM	0987	Tartar GMLS MK 11	23
GMM	0988	Tartar GMLS MK 13	24
GMM	0986	Terrier GMLS MK 10	24
GMG	0891	Asroc MK 16	15
GMG	0873	RFGM 5"/54	19

Minor changes in course lengths may occur as training curricula are varied.

A STAR IN THE NAVY



career designated men in pay grade E-4 except for hospital corpsmen and dental technicians. These categories are guaranteed a Class "C" school.

Class "A" school graduates must be in the top 50 percentile of their class (and the percentile is based upon a quarterly computation) to be eligible for automatic advancement. Men who aren't petty officers and who fall into the lower half of the computation will be designated strikers for the rating in which they trained and compete for advancement in the usual way.

Navy men in pay grade E-4 will be advanced to E-5 when they graduate from a Class "B" or equivalent Class "B" school. However, those who have already attended Class "B" school will not be permitted to attend again. Those who successfully complete a Class "C" school will not be automatically advanced unless it is designated a "B" school equivalent.

Those in pay grade E-5 receive a reenlistment bonus and guaranteed assignment to a Class "B," Class "C" or an equivalent Class "B" school if they are eligible; proficiency pay, if authorized, and variable reenlistment bonus are also paid under the STAR program.

"B" School Equivalents for STs

STG	0407	AN/SQS-23 Operation and Maintenance	17
STG	0417	AN/SQS-26 BX Operation and Maintenance	24
STG	0418	AN/SQS-26 AX Operation and Maintenance	24
STG	0471	MK-111 (Asroc) UWFC5	20
STG	0474	MK-114 (Asroc) UWFC5	14
STG	0479	MK-105 (MOD 11-23)	16
STG	0419	AN-SQS CX Operation and Maintenance	24
STS	0409	AN-BQG Series Operation and Maintenance	20
STS	0423	AN/BQQ1 Series Operation and Maintenance	30
STS	0427	General Submarine Sonar Maintenance	16
STS	0426	SSBN Submarine Sonar System Technician	16

Equivalent "B" Schools for MTs and TMs

MT/TM	Subroc Missile Technician	27
-------	---------------------------	----

"B" School Equivalents for ETs

Any combination of courses totaling not less than 19 weeks will be required. The assignments must be in accordance with BuPers training requirements and located in the same geographical area.

NEC	Course	Length (in weeks)
1505	AN/SPS 29 C	7
1506	AN/SPA 62	8
1507	AN/SPA 63	12
1508	AN/SPA 34	3
1509	AN/SPA 43	6
1511	AN/SPS-T3	3
1513	AN/SPS 32/33 (SPS 32 Radar)	8
	(SPS 33 Radar)	15
	(SPS 33 Computer/Tracker)	30
1514	AN/SPS 40	8
1517	AN/SPS T2A	4
1518	AN/SPS 43	8
1519	AN/SPS 30	8
1523	AN/SPN 35	7
1524	AN/SPN 6/12	5
1526	AN/SPN 10	15
1531	AN/FRT 24A	4
1532	AN/WRT 2/WRR 2	4

If you request Class "A" school, the test score you made when you took the basic test battery in boot camp will be examined. That portion of the test which applies to your rating must meet the minimum prescribed by the *BuPers Formal Schools Catalog* unless a five- or 10-point waiver is obtained.

Navy men who enter the nuclear power or *Polaris* Training Program must have completed two years of active naval service, and men in pay grade E-3 or E-4 may not have over three years of active duty. The limit on active military service for those in grade E-5 is 42 months.

If you have obligated yourself for the nuclear power, *Polaris* training or one of the Six-Year Obligor programs, you need serve only two years from completion of this training before you are eligible for transfer to a Class "B," "C" or equivalent "B" school. If you have any questions, check with your educational services officer.

The following is a list of equivalent "B" schools (as listed in BuPers Inst 1133.13C) after which automatic advancement to pay grade E-5 will be made for those who qualify in other respects:

1533	AN/UCC 1	2
1536	AN/SRC 20/21	2
1537	AN/GRC 27A	3
1539	TSEC/KW37R,K/KW 7	14
1541	TSEC/KY 8	10
1542	TSEC/KG14/KW 37R	16
1543	TSEC/KW 26	13
1548	TSEC/KG 13	13
1549	TSEC/KW 37T/KW 37R	9
1552		
1553		
1577	AN/CPN4A or MPN 5	19
1578	AN/SRN6/URN3/GRN 9	7
1579	AN/URN 20	4
1593	AN/WLR 1/ULQ 5/6	6
1598	AIR 32430-1	19

"B" School Equivalents for DSs

Any combination of courses totaling 24 weeks will be required. The assignments must be in accordance with BuPers training requirements and located in the same geographical area.

NEC	Course	Length (in weeks)
1616	NTDS Display	20
1617	NTDS Data Transmission	28
1618	NTDS Computer/Peripheral	20
1618	NTDS Key Set Control	4
	WDS MK X1 (System)	5
1621	WDS MK X1	5
1622	NTDS (IDAC)	2
1622	NTDS Video	3
	USC-2	5
	SYA VID SIM	2
	Terrier Interface	6
	SPS-48 A2/HT Console	2
	SRC-16	9
1636	OPCONCENTER SODS/SOCCS	12
1666	STD Navy Maintenance (3M)	
	UNIVAC 1500	12
1651	IOIC EDP	18
1652	IOIC IDS/SR	15
1631	OPCONCENTER FYK-1(v)	32



PACE-SETTERS— NAVY'S FLOATING

PACE (Program for Afloat College Education) is just what it says it is. It is an educational program which gives seagoing Navymen on certain ships and FBM submarines an opportunity to earn academic credit toward a college degree.

PACE is the result of an unusual partnership between the Bureau of Naval Personnel and several universities and colleges. It began approximately six years ago as the Polaris University program and has since been expanded to include considerable portions of the surface Navy.

In essence, PACE is based upon a combination of kinescoped lectures studied while the ship is deployed and supplemented by "live" classroom sessions with participating college instructors while the ship is in port.

A course usually consists of 15 half-hour films, made by an instructor who specializes in the subject under discussion. In addition, a series of conferences provide direct contact between the instructor and students. Supplementing the film are study guides and additional reading assignments. One inherent advantage of this teaching technique lies in the possibility of rerunning the film, or portions of it, if any point in the lecture appears to be confusing.

Following the viewing of the films, the students hold group discussions and complete their reading assignments and, upon their return to port, attend a series of meetings with the instructor.

Before final credit is given for any course, students are required to have at least eight hours of in-person classroom discussion with the instructor. Scheduling of these meetings depends upon deployment schedules. The period may be divided between the beginning and final phase of each course, or by means of weekly meetings scheduled throughout the course.

The instructor grades the papers which the student prepared at sea, and administers final examinations.

After the finals, the instructor submits the course grades to the school's registrar and to the Educational Services Officer aboard ship. The grades become a part of the official records of the participating colleges, and

a student may, at a later date, obtain official transcripts of the work he has done by writing to the Registrar's Office. A certificate of completion also is filed in the Navyman's service record.

THAT'S THE GENERAL IDEA. As for the details, which may be found in Chapter VII of the 1967 edition of the *Educational Services Manual*:

The participating universities normally require that a registration fee be charged. The amount is relatively small, but varies from school to school. Harvard and the University of South Carolina, for example, require a \$5 registration fee per course. San Diego State College calls for a \$5 registration fee for each credit hour taken. These amounts are not considered by the universities to be a tuition charge.

Registration fees usually may be refunded only if you officially withdraw from a course before the first class begins.

The cost of textbooks may vary from \$5 to \$20, depending on the course and where it is taken.

Academic requirements vary with the schools, but normally are not excessive. To get the most out of any course, you should be a high school graduate or hold the GED equivalent.

As the courses are at college level, they require considerable study time outside the classrooms. Therefore, it is recommended that in the beginning you enroll in only one course at a time. Later, this may be increased to two courses. Bear in mind that PACE school work is in addition to your regular shipboard duties.

At least 10 men on your ship must agree to take a specific course—and be accepted—before it can get underway.

Not more than eight separate classes may be administered aboard any ship at one time. If there is sufficient interest, a single subject may be taught in two or more classes held on different days. The maximum number of students in each class depends upon the participating university.

You do receive college credit for the completion of the courses you take.

PACE is especially attractive because it offers courses which are—usually—transferable upon satisfactory completion for full credit at most colleges and universities toward an associate or bachelor's degree. The final decision is, however, up to the school to which you will be applying. It may accept or reject any course, or give more or less credit than originally offered.

Every effort is made to shape the PACE courses similar to on-campus courses, but neither the PACE academic partner nor the Navy can speak for other institutions regarding the acceptance of credits.

AT PRESENT, PACE courses are available to crews of submarines operating out of New London, Charleston and Pearl Harbor, and to Navymen on the larger surface ships based in Boston, Newport and San Diego. In addition, type commands based at Quonset Point, San Diego, Charleston and Norfolk anticipate taking part in the program as of next July, with others to fol-

COLLEGES

low. It is planned that the program will be available to all ships by 1970.

To become more specific: The Pacific Fleet's *uss Ticonderoga* (CVA 14) is one of the largest subscribers with 122 crewmembers enrolled in seven different courses this year. They have found that carrier ready rooms, designed to be used for pilot briefings, make handy classrooms when PACE instructors visit the ship.

uss Newport News (CA 148), based in Norfolk, but scheduled for a tour in the Western Pacific, arranged to take her PACE courses through ComCruDesPac and administered by San Diego State.

The battleship *New Jersey* (BB 62), now being reactivated for duty off Vietnam, will become a part of the PACE campus.



NEW CAMPUS—USS *New Jersey* (BB 62), now being reactivated, will become part of PACE campus.

The program will go to Antarctica. Members of the Operation Deep Freeze wintering-over party will begin PACE studies in February. Harvard personnel will visit McMurdo Station to get the program started, and will finish the course administration in Christchurch, New Zealand, next October.

If you want additional details on PACE, your educational services officer can tell you whether your ship is now eligible, and if so, how to apply.

At present, schools which provide PACE academic functions are Harvard University, the University of South Carolina, San Diego State College and the University of Hawaii, as appropriate to homeport locations of eligible ships.

Here's a list of courses available under PACE. Note that completion of some courses is required before students may qualify to take more advanced courses. Not all the courses are available at each

Natural Sciences

- Chemistry I (Basic Principles of Chemistry)
- Chemistry II (Chemical Equilibrium)
- Chemistry III (The Covalent Bond)
- Chemistry IV (Some Elements and Their Compounds)
- Engineering I (Introduction to Computer Science, Part I)
- Engineering II (Computer Science, Part II)
- Engineering III (Introduction to Metallurgy)
- Engineering IV (Electrical Engineering)
- Mathematics I (College Algebra)
- Mathematics II (Analytic Geometry)
- Mathematics III (Introduction to Calculus, Part I)
- Mathematics IV (Introduction to Calculus, Part II—The Power Functions)
- Mathematics V (Introduction to Calculus, Part III—The Trigonometric Functions)
- Mathematics VI (Introduction to Statistics)
- Mathematics VII (Introduction to Modern Algebra)
- Mathematics VIII (Probability)
- Physics I (Introductory Mechanics)
- Physics II (Introductory Electricity)
- Physics III (Introductory Wave Motion, Sound and Light)
- Physics IV (Introduction to Modern Physics)
- Physics V (Mechanics and Heat)

- *Physics VI (Quantum Physics)
- *Physics VII (Electricity and Magnetism)
- Physics VIII (Electrical Engineering: Circuit Analysis)

Social Sciences

- Government I (Ideologies in World Affairs)
- Government II (American National Government)
- History I (World History, Part I)
- History II (World History, Part II)
- History III (A Study of Revolutions)
- History IV (History of the United States, Part I)
- History V (History of the United States, Part II)
- Psychology I (Principles of Behavior)
- *Psychology II (Forces in Action)
- Sociology I (Introduction to Sociology)
- Economics I (Economics and the Public Interest)
- *Geography I (Introduction to Geography)

Humanities

- Literature I (Expository English, Part I)
- *Literature II (Expository English, Part II)
- Literature III (American Literature—Major American Books)
- Literature IV (English Literature—The Critical Reader)

Additional Elective

- Slide Rule (Introduction to the Slide Rule—Non-Credit)



NESEP: A Scientific

IN 1956, the Navy sent a group of 54 enlisted men to Lafayette, Ind., to study electrical engineering at Purdue University. This was the birth of the Navy Enlisted Scientific Education Program, better known as NESEP, a two-pronged educational plan for studious, career-minded enlisted men and women.

Success with NESEP means a college degree and a commission in the Regular Navy. The program helps fill the need for topnotch naval officers and, at the same time, sees to it the officers are formally educated to meet

NESEP STUDENTS show new mode of dress to campuses.



latest technological demands of this century.

Twenty-two universities take part in the NESEP program. Purdue, with some 220 NESEP students on campus each year, is the largest of the Navy's college partners.

In essence, NESEP is an investment program. The Navy, by putting the candidate through college, invests in his potential for service as a commissioned officer.

Potential for NESEP is determined in the course of application, processing, interviews, recommendations and, finally, selection. If you make it into the program, which as you'll see is no easy matter, you will receive an uninterrupted education. The maximum is four years of college, including summer sessions.

Staying in school once you're there is a full-time job. The Navy enforces its academic standards. Unacceptable conduct, or evidence of "just getting by," could mean disenrollment from NESEP and return to the Fleet.

IF YOU'RE INTERESTED at this point, here's a rundown on NESEP as outlined in BuPers Inst. 1510.69 series. First, check the general eligibility requirements:

Citizenship—You must be a citizen of the United States. If you are a naturalized citizen, or were born abroad, you must obtain a Certificate of Citizenship from the Immigration and Naturalization Service.

Service—You must be enlisted in the Regular Navy, or be a Naval Reservist on active duty. You must have completed at least one year of active duty (not counting service school or other duty in a school environment) before 31 December of the year of application. Requests for waivers on this point are considered for outstanding candidates.

Other Programs—If you have been selected for any other in-service officer procurement program, you are not eligible for NESEP.

Obligated Service—You must have sufficient obligated active service to complete preparatory school (approximately 1 September of the year selected), plus one additional year. You may extend your enlistment to acquire any needed obligated service.

Marital Status and Sex—You may be married or single, man or woman.

Rating—You must be E-4 or above as of 31 December of the year of application.

Age—You must have reached your 21st but not your 25th birthday by 1 July of the year selected. Selections are made in February. Waiver of minimum age may be considered for outstanding candidates who are at least 19 by 1 July of the year selected. Waiver of maximum age may be granted on the basis of one year for each year of previous college credits that can be transferred to your NESEP curriculum.

Education—You must be a high school graduate, or must have completed three years of high school and possess a GED equivalent with a grade in the 75th percentile or above in each of the test areas. A desirable high school background consists of four units (one year's work) of English, two and one-half to three units of

Education

math, and two or three units in physics, chemistry or biology.

Basic Battery—You must have a combined GCT/ARI score of 115 or higher. Waiver for this requirement will not be considered. (However, you may be able to be reexamined on the basic test battery if your present scores are too low for NESEP qualification. BuPers Inst. 1220.6 series contains information with regard to BTB reexamination.)

Physical—You must meet the physical standards prescribed for officer candidates in Chapter 15, *Manual of the Medical Department*. Waivers may be considered for defective vision, provided the defect is correctable to 20/20 with standard glasses.

Disciplinary—You should have no record of conviction by court-martial or civil court for other than minor traffic violations. However, your commanding officer may process your NESEP application, even though you may have had minor civil arrests. This depends on how outstanding a candidate your CO thinks you are. In any event, you must have a clear record, except for minor traffic offenses, during the two years preceding 1 July of the year you apply.

Recommendation—Your CO must recommend you specifically for NESEP. This will be based on such factors as your patriotism, sense of duty, conduct and financial responsibility. You must meet the highest standards of character expected of a naval officer.

IF YOU MEET the above general qualifications, you could be on your way to a NESEP education and commission. But keep in mind that only one in three who apply for NESEP actually makes it to a college campus. This year, 310 NESEP applicants were graduated from prep school and started college in September.

The program is highly selective. Its success is measured in terms of candidate quality. This may be judged on the basis of academic achievement, native intelligence and aptitude, and individual maturity and drive.

How do you determine you have what it takes to make the grade? Indications of your academic ability are reflected in your service school credits and what you've accomplished with off-duty study and correspondence courses. If you have a good record in this regard, you've pretty well indicated your ability and motivation for educational improvement.

If you decide to push on with the application, the basic NESEP directive prescribes the format to use. Your letter must be submitted after 1 July and reach the Chief of Naval Personnel no later than 1 October.

IT IS EMPHASIZED that your application be complete, concise and accurate in every detail. Preparation is a joint responsibility between you and your command.

The application must include: handwritten statement by you; Report of Medical Examination; medical history; Statement of Personal History; Armed Forces Security Questionnaire; transcripts or signed copies of requests for transcripts; and evidence of U. S. citizen-



BACHELOR OF SCIENCE degree is offered by NESEP program in engineering, science or mathematics fields.

ship if you were born outside the United States.

Your academic transcripts, high school or college, must accompany your application or be forwarded directly to the Chief of Naval Personnel by your old school. Transcripts must contain grades in addition to credits earned.

Note that virtually all universities disqualify students who attempt to conceal their past academic records. Therefore, it is mandatory that transcripts be obtained for all periods of attendance in secondary and higher level schools. If you have ever been disenrolled, suspended or placed on probation, or have ever withdrawn from college, you should also obtain a statement from the school concerned, stating that you are eligible for readmission.

A one-page, handwritten statement, personally composed by you, should give the reasons why you wish to participate in NESEP and become an officer. If you attended college previously, you should include in the statement your reasons for leaving. If your record includes any significant civil or military conviction, you should make a statement with regard to the circumstances.

Also indicate in your application any desires for special programs such as flight training, submarine training or nuclear power training.

Next, your commanding officer will appoint a board of three officers to interview you and other NESEP applicants. The command board appraisal of you is considered highly important by the Chief of Naval Personnel.

BE SURE you're honest with the board so that it can come up with a fair and accurate evaluation. Non-committal comments or remarks that are inconsistent with your past evaluation or career potential may have an adverse effect when it's time for final NESEP selections.

Your CO may wish to interview you personally. His recommendation will be in the form of an endorsement to your letter of application, and will probably contain his analysis of your personality and observable traits.

Between 1 August and 1 October, your command will request NESEP examinations from the Naval Examining Center. The exam is administered Navywide on the second Monday in November. (If the second



SUCCESS in completing NESEP means a commission.

Monday falls on a national holiday, the tests are conducted the following day.)

There are no "pass" or "fail" lines drawn for NESEP exams. Your test is returned to the Naval Examining Center for grading, and receives a relative standing among all other NESEP exams taken for that year's program.

During January and February, a selection board convened by the Chief of Naval Personnel considers the applications of all qualified NESEP candidates. Those found to be the best qualified are designated "provisionally selected." The names are published in a BuPers Notice 1510 during March.

PROVISIONAL SELECTEES are again screened before ordered to the summer preparatory session. This further screening takes the form of a Scholastic Aptitude Test (SAT) issued by the College Entrance Examination Board. The SAT helps determine your admissibility to a NESEP college or university. If you do not score sufficiently well on the test, your status as a provisionally selected NESEP candidate is ended.

After you have overcome the SAT hurdle, you are issued orders to the U. S. Naval Preparatory School at NTC Bainbridge, Md., or to the Service School Com-

mand, NTC San Diego, Calif. You report in early June for approximately nine weeks of instruction. At this point you must have sufficient obligated service to complete at least one year of active duty following prep school.

Prep school involves refresher training in math, physics and English usage, and orientation in college academic requirements. You also receive additional medical checks, with emphasis on your vision.

After an interview (during which you may state your preferences), you are tentatively assigned a major field of study and one of the 22 NESEP universities (see box).

Only after you finish prep school and are accepted by a college are you finally considered selected for NESEP. If you attended college previously, you might be able to enroll with advanced standing. This depends on whether your new college will accept the credits from the old school, and whether the credits apply to your prescribed course of study.

AT THIS POINT you become increasingly aware of obligated service factors. Before you are detached from prep school, you are discharged and reenlisted in the Regular Navy for six years. Or, if you had shipped for six during the preceding two years, you could extend your enlistment to acquire the necessary six years' obligated service. After your second year of college, you must agree to extend for two additional years, thus retaining a six-year obligation.

Before you enroll in college, you must sign an agreement to accept a Regular Navy commission if offered. Once you're an officer, you must serve on active duty for at least nine months for each six months, or fraction thereof, of education. In no case will your active duty obligation be for less than four years. Your education is computed from date of reporting to prep school until the date of your commission.

In any event, your NESEP education will not exceed four consecutive years, and counts as normal shore duty.

With your service obligations in mind, the next step is to go to school to commence studies at the start of the fall term.

As a NESEP student, you are entitled to all the rights and benefits that accompany a Navy career. You draw the same pay and allowances as others in your rating, minus, of course, such special pay as sea pay or hazardous duty pay. (At this writing, based on fiscal 1968 money allocations, NESEP students do not draw proficiency pay.)

NROTC UNITS located at each of the 22 NESEP universities handle personnel, administrative and pay matters. You maintain an enlisted status until you finish school and receive a commission, but are eligible for advancement in rating under established procedures. You are not eligible for other in-service officer procurement programs.

You attend regular classroom sessions and summer sessions. You are granted annual leave during academic holidays.

NESEP students customarily wear their Navy uniforms to school one day each week. The guideline here is that the Chief of Naval Personnel encourages the NESEPs to blend in with a primarily civilian atmosphere, but that the Navy uniform should be shown

periodically. (On the subject of uniforms, the Chief of Naval Personnel was, at ALL HANDS press time, awaiting CNO approval of his recommendation that NESEP students wear officer candidate-type uniforms.)

Once each year you are given a medical exam to reaffirm your fitness. During your final year at school, and within one year of your planned commissioning date, you receive a final physical exam to confirm your qualifications. If, even this late in the game, you do not meet the physical standards for a commission, you will be dropped from the program.

And remember, you could be dropped from NESEP at any time for unsatisfactory academic performance, or for other reasons of unsuitability outlined in NavPers 92964B (*Regulations Concerning Instruction and Administration of NESEP Students*). Should you be disenrolled, you would be made available for duty in the pay grade and rating you hold at the time. You would be required to complete the term of your enlistment, including any agreements to extend.

NESEP dropouts have occurred. However, if you're good enough to get into the program, chances are you'll be part of a NESEP success story if you study hard and stay out of trouble.

NESEP students before you have already started a fine tradition. Many of the colleges and universities speak highly of the maturity and seriousness of the Navy students. Many have called for more NESEPs, noting the stimulating effect they have on civilian stu-

dents attending classes with them.

Program administrators explain that the average NESEP student is older and more mature than the average civilian freshman. Approximately 75 per cent of all NESEPs are married men who see the program as a fine way to finish college and move up in the world.

And, NESEP is respected in the armed services. Some officials believe the average of 300 NESEP graduates yearly is too low, and should be increased to 500.

After college and before commissioning, NESEP students at present must attend some 18 weeks of training at the Officer Candidate School, Newport, R. I. However, future plans call for a 10-week course of OCS training during the summer before graduation—usually between the junior and senior years. The NESEP student would then receive his commission at the same time he receives his college degree.

The last step in NESEP is the payoff—your commission. NESEP graduates are commissioned primarily in the unrestricted line of the Regular Navy. Exceptions to this occur only occasionally; a restricted line commission calls for a master's degree and two years at sea in an enlisted status, plus other requirements. However, in virtually all cases, NESEP students who make the grade are assigned three or four years of sea duty as unrestricted line officers, 1100 designator.

If NESEP is the educational program for you, check the latest BuPers Inst. 1510.69 series for details on eligibility requirements and how to apply.

—Dan Kasperick, JOC, USN.

Here's a roundup of the NESEP universities listed in BuPers Inst. 1510.69 series:

Auburn University
Auburn, Ala.
University of Colorado
Boulder, Colo.
University of Idaho
Moscow, Idaho
University of Kansas
Lawrence, Kans.
University of Louisville
Louisville, Ky.
Marquette University
Milwaukee, Wis.
Massachusetts Institute of Technology
Cambridge, Mass.
Miami University
Oxford, Ohio
University of Mississippi
University, Miss.
University of Missouri
Columbia, Mo.
University of Nebraska
Lincoln, Neb.

University of New Mexico
Albuquerque, N. M.
University of North Carolina
Chapel Hill, N. C.
North Carolina State University
Raleigh, N. C.
University of Oklahoma
Norman, Okla.
Pennsylvania State University
University Park, Pa.
Purdue University
West Lafayette, Ind.
Stanford University
Stanford, Calif.
University of Texas
Austin, Texas
University of Utah
Salt Lake City, Utah
Vanderbilt University
Nashville, Tenn.
University of Washington
Seattle, Wash.

The following is a listing of major college courses available under NESEP. Note that nuclear engineering is not available on undergraduate level. Nuclear subjects may be elected as options during the junior and senior year for students who qualify.

Engineering

Aeronautical, Chemical, Electrical, Mechanical, Metallurgical and Engineering Physics.

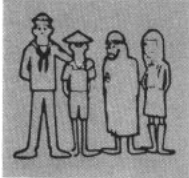
Science

Physics, Nuclear Physics, Chemistry, Meteorology and Oceanography.

Mathematics

As approved by the Chief of Naval Personnel, including Systems Analysis/Computer Science.





LEARN A LANGUAGE—

A YOKOSUKA-BASED Navy doctor once decided, the story goes, to help provide a newly arriving Navy nurse with a quick initiation into the Japanese way of life.

He dutifully met her plane at Tachikawa airfield, and warmly welcomed her to Japan. Unfortunately, he explained, he had an appointment elsewhere on the base, and therefore would be unable to drive her to the nurses' barracks at Yokosuka. He had, however, hired a taxicab.

Just before helping her into the waiting cab, he warned her that Japanese cab drivers are prone to drive a little fast. If he gets too lead-footed, said the good doctor, just lean over and say "Hayaku," meaning "go slower." Unfortunately for the young nurse, "hayaku" actually means "go faster."

The doc then said "sayonara" to the young lady, and went whistling on his way.

When our heroine got into the cab, she took great pains to tell the driver "hayaku, hayaku"—she said it twice for emphasis. He looked at her in astonishment, but then smiled and nodded in agreement.

He started the car, revved up the engine, banged it into gear, and squealed away from the terminal. The nurse was thrown to the back of the seat, her legs and arms flailing wildly as she tried to right herself.

"Hayaku!" she shouted to the driver. Obediently he pressed his foot down harder.

The road grew narrower. The nurse yelled "hayaku." The driver went faster. A double-decker bus loomed ahead, taking two-thirds of the narrow road. The cab swerved. The nurse was thrown to the floor. "Hayaku" she begged from the depths of her luggage. The cabbie hunched over the wheel and tried to get more speed out of his old taxi. He was determined to please.

The nurse struggled to pull herself up to where she could see the road over the driver's shoulder. She shouldn't have. Just ahead of the bouncing, speeding taxi was a road full of bicycles. She shut her eyes and

screamed "Hayaku!" The driver leaned on his horn, his eyes wide with terror. A madwoman, he decided.

When the cab screeched to a halt in front of the barracks at Yokosuka, the disheveled young nurse was staring blankly ahead, faintly muttering "Hayaku. Hayaku." The driver turned around. His face was covered with sweat, and he was shaking uncontrollably. They stared at each other for a long minute—uncomprehendingly.

THE PRECEDING INCIDENT should never have happened. The foreign language study programs available to Navymen—and women—are comprehensive enough to ensure that one should never become completely lost when in a foreign country, simply because he can not communicate.

This is not to say that all languages are covered by the Navy's foreign language study program. However, the list of those available is quite extensive, and even the most seasoned traveler—with a little effort—can solve his communication problems before they happen.

There are four systems available by which a Navymen may obtain voluntary, off-duty training in a foreign language. Three are informal methods of study, and are meant to provide only a smattering of the language in question. One, however, is a formal correspondence course and may be taken for high school or college credit.

Self-study, first level

This system consists of sets of two 78-rpm records, and in most cases an accompanying pocket-sized booklet called a "language guide."

Although these materials do not constitute a course, they can be valuable to acquaint the crew of a ship headed for a foreign port with a few of the words and phrases they will need.

Records of the appropriate language can be piped over the 1A system each day, or even several times a day. Crewmembers follow along with the language guides.

In most languages a phrase book, which is much like the language guide in size and approach, but with a more extensive vocabulary, is available. The phrase books may be given to men who show interest in the language and wish to go beyond the material in the language guide.

These self-study materials may be requisitioned through the Naval Supply Centers at Norfolk, Va., and Oakland, Calif., at no cost to the command or individual.

The recordings are available in Albanian; Anamese; Arabic (Algerian, Egyptian, Iraqi, Libyan, Moroccan, North African, and Syrian); Bulgarian; Burmese; Cantonese; Chinese; Czech; Danish; Dutch; Finnish; French; German; Greek; Hindustani; Hungarian; Icelandic; Italian; Japanese; Korean; Malay; Melanesian Pidgin English; Norwegian; Persian; Polish; Portuguese (Brazilian); Rumanian; Russian; Serbo-Croatian; Sicilian; Spanish; Swedish; Tagalog; Thai; and Turkish.

FOREIGN FRIENDS—Language courses available to Navymen are a great help to Navymen overseas.



ON-THE-JOB

Language Familiarization Kits

Each of these kits consists of two 33 $\frac{1}{3}$ -rpm records and an accompanying language guide. While it, too, is not a formal language course, it is more comprehensive than the first level. These kits also are available from the naval supply centers at Norfolk and Oakland.

The available languages include: Amharic; Arabic; Bengali; Cambodian; Chinese; Danish; Dutch; Greek; Hausa; Hebrew; Hindi; Indonesian; Italian; Kurdish; Norwegian; Persian; Portuguese; Russian; Serbo-Croatian; Swahili; and Thai.

Correspondence Courses

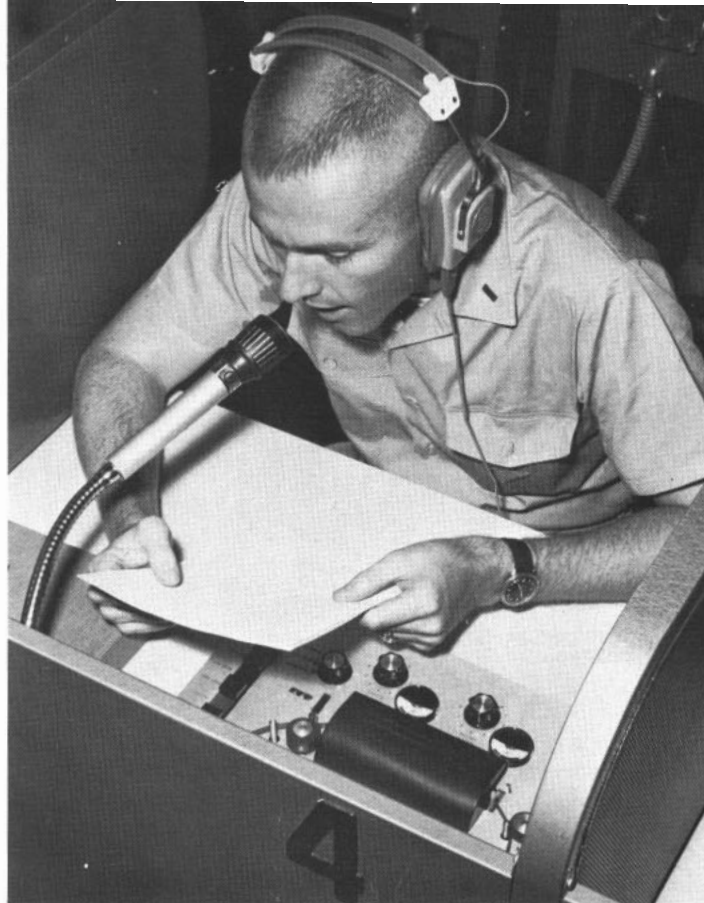
Presently, there are two types of language correspondence courses offered through USAFI which give the student either high school or college credit. The first of these is a direct USAFI course which is at a level equivalent to that usually offered in the first two years of high school or the first year of college.

These courses cover fundamentals of the language with emphasis on the development of reading ability. Each course is divided into two parts, and an end-of-course test or USAFI subject standardized test is available for each part.

The second type is offered through USAFI, but administered directly by one of several participating colleges. Applications are reviewed by USAFI primarily for military eligibility and then forwarded to the appropriate college, which accepts or rejects on the basis of its own criteria.

After the student's enrollment, all correspondence relating to the course is handled directly with the college. Twenty-four months are allowed for the completion of a course. If you plan to take a language course for school credit, you should, before enrolling, write to the school concerned to determine whether credit will be granted for the desired courses.

Formal correspondence courses offered by USAFI



LANGUAGE student uses tape recorder to practice speaking and listening to the Vietnam language.

include: *Beginning Latin I and II* (Catalog No. B 575, 576); *Beginning French I and II* (No. B 577, 578); *Beginning German I and II* (No. B 579, 580); *Beginning Russian I and II* (No. D 581, 582); *Beginning Spanish I and II* (C 583, 584); and *Beginning Italian I and II* (No. B 585, 586).

Spoken Language Courses

Another USAFI-sponsored program, spoken language

Navy Was a Pioneer in Accelerated Language Teaching

Foreign language training for Navymen is nothing new. Records of Navymen studying foreign language as part of their duties go back many years.

However, it wasn't until World War II that language training for the Man in the Fleet got underway on a large scale.

From 1923 to 1940, a small group of Regular Navy and Marine Corps officers were trained in Japanese or Chinese, at schools in the Orient. Both courses were extensive, requiring three years of study.

In September 1941, the Navy started its own Japanese language courses at Harvard and the University of California. These were later consolidated to form the Naval School of Oriental Languages at the University of Colorado.

In 1944, Chinese, Russian and Malay were added, and in April 1945 an additional Naval School of

Oriental Languages was established at Oklahoma A & M.

Between 1941 and 1946, approximately 1250 language officers were graduated in Japanese, Chinese, Russian and Malay, and the time of all courses was shortened by highly intensive training methods. For example, the three years of study previously required to master Japanese was shortened to one.

Thus, according to Navy language officials, the Navy pioneered the "cram" method of teaching foreign languages.

In 1946, the Naval Intelligence School was established in Washington, D. C., and language training for Navymen was shifted to the Intelligence School.

The Navy Language School remained under Naval Intelligence until 1 Jul 1963, when it was officially absorbed by the Defense Language Institute.



HONOR MEN—Seaman Ernest E. Karjala, USN, and LTJG Peter G. Guptill, USN, receive awards for scholastic achievement during graduation ceremonies from Defense Language Institute, West Coast Branch, Monterey, Calif.

courses, consists of six 33 1/3-rpm records, and three manuals to accompany them. The third manual is written entirely in the foreign language, and is intended for the use of an instructor or class leader who speaks the language.

The first manual covers units one to 12 which teach speech in simple situations. The second manual covers units 13 to 30 and teaches speech in more complicated situations. There are no records for units 13 to 30.

While the emphasis of these materials is strongly on the spoken language, a conscientious and able student can acquire a fair mastery of a language, simply by hearing and speaking it.

USAFI's spoken language courses are available in Burmese, Chinese, Danish, Dutch, Finnish, French, German, Greek, Hindustani, Hungarian, Iraqi Arabic, Italian, Japanese, Korean, Malay, Melanesian Pidgin English, Norwegian, Portuguese, Russian, Serbo-Croatian, Spanish, Thai, Turkish and Vietnamese.

These courses may be ordered from USAFI, either for group study, or for the use of individuals.

Language Instructor Hire

Many commands have taken advantage of the Instructor Hire program (discussed elsewhere in this issue) to provide off-duty foreign language training to interested personnel. Using funds provided by the Bureau of Naval Personnel, local instructors are hired by the command to teach a selected language on a group study basis. Where possible, USAFI texts and other materials are used.

This program is especially applicable to overseas shore commands. Navymen stationed ashore in foreign countries obviously need to know the local language better than shipboard crews who will be visiting a port only for a short time. Therefore, many overseas commands have instituted special programs of language study for their shore-based Navymen and their dependents.

Language Texts Are Available

In addition to the language study programs discussed in the accompanying article, there are also available commercially published texts which may be ordered from the naval supply centers in small quantities for use by your command.

These may be used by small groups, or by individuals who wish to acquire a knowledge of grammar and the written language, or who wish to supplement a course in the spoken language with work of a more formal nature. Available are:

FRENCH

● Parker—*Revised Elementary French Grammar*

● Bazin—*Les Oberle* (novel)
● Keating and Morand—*French Cultural Graded Readers, Elementary*. Book I (Audubon); Book II (La Fayette); Book III (Lafitte)

● Harris and Leveque—*Basic French Reader*

● Heise and Muller—*A Conversational Introduction to French*

● Brady—*Vingt Contes Divers*

GERMAN

● German Elementary Cultural Graded, Reader Series: Book 1 (Schweitzer); Book 2 (Thomas Mann); Book 3 (Heine); Book 4 (Beethoven)

● Schinnerer—*Beginning German*

ITALIAN

● Russo—*First Year Italian*
● Russo—*Second Year Italian*
● Hall and Bartoli—*Basic Conversational Italian*

LAO

● Lao Language Familiarization Course Text

PORTUGUESE

● Williams—*An Introductory Portuguese Grammar*

● Carter—*Contos e Anedotas Brasileiros*

● Ricco—*Introduction to Brazilian Portuguese* (Grammar)

RUSSIAN

● Patrick—*Elementary Russian Reader*

SERBO-CROATIAN

● Prince—*Serbo-Croatian Grammar*

SPANISH

● Kasten and Neal-Silva—*Lecturas Escogidas*

● Hugowast—*Pata de Zorra* (Novel)

● Hill and Duceta—*Antologia De Cuentos* (reader)

● Guyer and Ugarte—*Platicas Temas*

● Cabrillo, Starnes and Heller—*Spanish, a First Course*

● Valdes—*Jose* (reader)

Language dictionaries which are available through the naval supply centers include:

● French Dictionary for the Soldier
● German Dictionary for the Soldier

● Italian Pocket Dictionary—Hugo

● Russian Pocket Dictionary—Hugo

● Russian Vest Pocket Dictionary—Otteneheimer

● Spanish Vest Pocket Dictionary—Otteneheimer

Also available, but only to advanced students or teachers, are:

● New French—English and English—French Dictionary—Cassell

● New Cassell's German Dictionary

● Cassell's Italian Dictionary

● Malay Dictionary

● Modern Portuguese—English and English—Portuguese Dictionary—Richardson

● Dictionary of Spoken Russian

● New Revised Spanish and English Dictionary—Velazquez

The following special purpose dictionaries are also available as needed:

● French Military Dictionary

● German Military Dictionary

● Russian-English Glossary of Soviet Military Terminology

One example is a special radio broadcast over the Italian radio network aimed at providing the American contingent in Naples with the rudiments of the Italian language.

An instructor, hired locally with BuPers funds, gives Italian language classes during time donated by the local network.

Broadcast for 15 minutes each weekday morning, the radio lesson is reportedly heard by over 90 per cent of the Americans stationed in the Naples area.

Defense Language Institute

So far, only off-duty foreign language study has been discussed. There are some Navy billets, however, which require language training on an official basis. Assignments to Military Assistance and Advisory Groups (MAAGs), Naval Attaches, and Missions often require a working knowledge of the appropriate language.

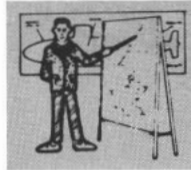
(In most cases such jobs are held by officers, although there are some enlisted overseas assignments which require language training.)

In such cases, the Navyman, before he receives orders to the MAAG, Attache or Mission, is sent to the Defense Language Institute to learn the language.

There are three branches of DLI teaching foreign languages. What was formerly the Army Language School, at Monterey, Calif., is called DLI, West Coast Branch. The Navy Language School was renamed DLI, East Coast Branch. In addition, there is a smaller branch, called the Support Command, which is located at Fort Bliss, Texas.

The Defense Language Institute headquarters, and its East Coast Branch, are located at the Naval Station, in Washington, D. C.

The DLI headquarters staff consists of 12 officers representing all the services, eight senior civilian lan-



Instructors For Hire

In many cases the Navy will pay the salaries of instructors who go aboard ships and stations to teach classes of Navymen.

The *Educational Services Manual*, NavPers 15229 series, in fact, encourages commanding officers to establish such classes, preferably in those subjects normally taught in elementary school, high school, and college. When possible, USAFI materials are used in the classes.

If the instructor is a qualified civilian hired on a part-time basis to teach military personnel in group study classes, his salary can be paid from appropriated funds. Commanding officers of shore stations may, at their discretion and in accordance with current regulations, hire civilian and enlisted instructors with Navy recreation funds.

Whether or not the course taught is accredited does not influence the program. Accreditation is a matter to be negotiated by the individual command and the educational institution involved.

guage advisors, and eight enlisted administrative personnel.

At present, DLI offers training in 24 different languages at its West Coast Branch, and 10 at DLI East.

—Jim Teague, JO1, USN.



GED—What Do You Know?

IF YOU DROPPED your formal education somewhere short of receiving a high school diploma, you should keep in mind that the educating process goes on (albeit at a changed pace) even though you are not in school.

The Navy takes this into account, and makes use of General Educational Development (GED) tests to find out how much you know. These tests measure the level of education you have acquired, either formally, or through informal self-education and intellectual growth. The emphasis in the GED tests is on measuring your ability to think clearly, to interpret, to comprehend, and to evaluate.

In short, the tests determine whether or not you have acquired the equivalent of a high school education.

Present high school GED tests consist of five parts: Correctness and effectiveness of expression, social studies, natural sciences, interpretation of literary materials, and general mathematical ability.

Results of the GED tests are reported in terms of standard scores and percentile ranks. The Commission on Accreditation of Service Experience has recommended minimum passing scores acceptable for civilian and military use.

This recommendation is of an advisory nature, and

does not guarantee that any school or state department of education will grant a diploma or equivalency certificate on the basis of the GED tests. Each state establishes its own standard for the granting of diplomas or equivalency certificates.

The Commission's recommended scores are, however, accepted by all the services as equivalent to high school graduation. If you do not yet have your high school diploma, the GED tests might be just the ticket for you to go on to better things. Your educational services officer can give you more information.





JUNIOR COLLEGE

VIA ADCOP

THE NAVY OFFERS its Associate Degree Completion Program (ADCOP) as a career incentive aimed at retaining outstanding enlisted men in critical ratings. It expects the program to increase the professional proficiency of these men through vocational training at civilian institutions.

As the name of the program implies, it leads to an Associate of Arts/Science degree for enlisted men who can complete the necessary academic work in less than the usual two years.

An ADCOP pilot program was undertaken in fiscal year 1967 in which 75 enlisted men were selected; 75 additional men were entered this fiscal year. The coming year, however, may prove to be another important milestone for the program in that an evaluation will be made to determine the program's value to the individual participants and to the Navy.

In making selections for the program, special emphasis is placed on the semiannual evaluation marks of the applicant, as well as his performance in Navy schools and the effort he has made to achieve an advanced academic level while in the Navy.

ADCOP applicants also are required to furnish proof of their United States citizenship and must have served at least one enlistment in the Regular Navy. They must also be career petty officers second class or above.

Both men and women are considered for the program provided they are between the ages of 25 and 40 when they apply. Candidates must be graduates of an accredited high school or have completed three years of high school and have a GED equivalency certificate or diploma issued by a state department of education or an authorized high school. Applicants' grades must have been in the 50th percentile (or higher) of each test area.

Navymen who apply for the program should also have completed Class "A" and "B" schools although, under certain circumstances, a Class "C" school equivalent may be substituted for the latter.

Navymen who cannot satisfy the "A" and "B" school requirement (or the "C" school equivalent) may substitute a minimum of 12 transferable college credits.

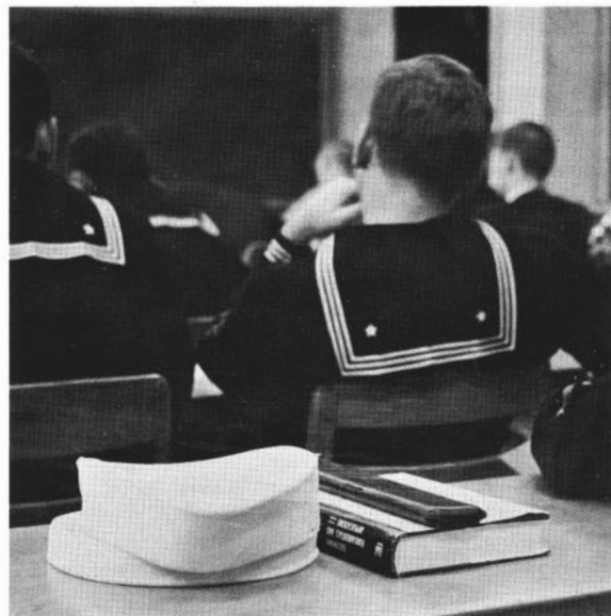
Applicants must have completed at least one enlistment and must agree to extend their enlistment or reenlist for six years at the time they enter the Associate Degree Completion Program. Either their active obligated service must expire between 1 Mar 1967 and 31 Aug 1968 or they must reenlist during that period.

FOUR COLLEGES now participate in ADCOP. They are Palomar College at San Marcos, Calif., Mt. San Antonio College, Walnut, Calif., Wentworth Institute, Boston, Mass. and Pensacola Junior College, Pensacola, Fla.

Prospective students are encouraged to list their school preferences. The selection, however, in addition to student preferences, will be based upon course of study, credit given for previous college and/or service schools and the student's ability to complete the

associate degree requirements at the college in less than two years. Particular emphasis is given to the applicant's motivation for higher education as reflected in his off-duty educational efforts.

Students who are selected under the Associate Degree Completion Program are ordered to college on permanent change of station orders. The course to



which they are assigned will closely relate to their ratings.

All students are enrolled full time, including summer sessions. They may wear civilian clothes while on campus as specified by the Chief of Naval Personnel.

The Navy command located nearest the college administers the students who receive full active duty pay and allowances (except proficiency pay) and are permitted to compete for advancement in rating and the warrant officer program.

INSO FAR AS Seavey/Shorvey is concerned, Navymen who report to ADCOP instruction from neutral time duty can compute their return to sea duty by adding the combined period of ADCOP instruction and previous neutral time to the sea duty commencement date established before they reported for instruction.

For those who reported to ADCOP from sea duty the number of months of ADCOP instruction will be added to their original sea duty commencement date and they will be returned to sea with the adjusted SDCCD.

Navymen who reported to ADCOP instruction from a normal tour of shore duty can determine whether they will have sea or shore duty after completion of their instruction by using the following method of computation:

Subtract the entire period served ashore before reporting to ADCOP instruction (as well as the time

spent during instruction) from the length of shore tour established by the shore station served at immediately before ADCOP instruction.

If 14 months or more remain, the individual will be retained ashore for completion of a normal tour of shore duty. If less than 14 months remain of a normal shore tour, one of the following alternatives will apply:

- When the combined period served ashore is less than 24 months, add it to the previously established sea duty commencement date and return to sea duty.

- When the combined period served ashore is 24 months or more, credit it as a normal tour of shore duty and return to sea duty.

Navymen who reported to ADCOP training from a "for duty" tour of duty ashore should credit the period served before reporting for ADCOP and the instruction

itself as shore duty and return to sea duty.

If an ADCOP student qualifies for Seavey assignment, after his shore duty completion date is adjusted, he may be assigned to a normal tour of shore duty if a vacancy exists within shore manning levels and there is no one else with an older shore duty completion date available from Seavey listings.

If Seavey-eligible graduates or nongraduates cannot be assigned ashore within these guidelines, they will be returned to sea duty with a 14-month sea extension to provide stability at their new duty station and to prevent payment of a second dislocation allowance.

If the needs of the service dictate or there are extenuating circumstances which warrant deviation from these procedures, an exception will be considered by the Chief of Naval Personnel (Pers-B21).

FINANCING YOUR EDUCATION

A GREAT MANY Navymen are pursuing programs of off-duty formal education. Just how many no one knows for certain, but there were at least 20,000 course enrollments recorded by Navy education offices last year.

These part-time students reap definite benefits, above and beyond the personal satisfaction of bettering their education. The individual with the initiative to continue his training after hours automatically improves his chances for advancement, for selection to special programs (such as the Associate Degree Completion Program) and ultimately for assignment to the more challenging billets.

An education, of course, can be expensive—and this is where the Navyman has an advantage over most civilian students. Your education can be partially paid for by the government, either through the Tuition Aid Program, or under the provisions of the Veterans Readjustment Benefits Act of 1966, commonly known as the Cold War G. I. Bill.



Tuition Aid

The Tuition Aid Program will pay 75 per cent of tuition costs for Navymen who wish to participate in certain approved off-duty educational programs. It is available to Regular Navy personnel, Naval Reservists on continuous active duty and members of the other armed services assigned to duty with the Navy.

Tuition aid may be granted for the purpose of study at any of the following approved institutions:

- Educational institutions accredited or approved by a nationally recognized accrediting agency, or by a state department of education, or by a state university. If you are in doubt, check with your Educational Services Officer, who will consult the appropriate directives.

- U. S. high schools, providing they are accredited by their regional accrediting agencies.

- Certain foreign colleges and universities. (In this case, however, you must submit your tuition aid request to the Bureau of Naval Personnel.)

Under no conditions is tuition aid granted for study at any institution which discriminates in any fashion against race, color or national origin.

As a general rule, tuition aid is granted for educational, professional and vocational courses at all levels of education, providing only that the institution attended meets the above criteria. However, correspondence courses and programs for avocational or recreational purposes are not approved.

IN CERTAIN CIRCUMSTANCES, tuition aid is approved for "no credit" courses. This is usually the case only when the student is seeking to prepare for higher level credit courses in which he is presently ineligible to enroll. Approval for "no credit" courses is given only when the course in question involves formal class attendance, homework or class study, and satisfactory course completion is dependent upon the passing of a final examination.

Until recently, tuition aid would pay three-fourths of the tuition costs, not to exceed \$14.25 per semester hour (or prorated amounts for quarter hours and Carnegie Units). As of last July, however, the maximum cash limitation was removed, and the Navy will now subsidize a straight three-fourths of the tuition costs.

One other limitation on tuition aid remains, however. The Navy will not subsidize more than seven semester hours (or the equivalent in quarter hours or Carnegie Units) per semester. This is dictated by logic. Seven hours is almost half of a full college load, and more might induce obvious dangers. Too demanding a program could cause grades to suffer, military performance to drop, and family problems to develop.

By the same token, men participating in a full-time college program, such as the college degree or associate degree completion programs, are not eligible for tuition aid.

IF YOU WISH to apply for tuition aid you should submit, as early as possible, the tuition aid request form (available at most personnel and Educational Services offices). When submitting your request, you must specify the institution you wish to attend and the

course in which you wish to enroll. Tuition aid may be granted before your course begins, or while it is in progress, but not after it has been completed.

Officers who apply for tuition aid must sign an agreement to remain on active duty for two years after completion of the course. Once the study begins, this agreement is binding—unless the officer is unable to finish due to circumstances beyond his control, such as the receipt of change-of-station orders.

Tuition aid may not be used to supplement financial assistance received from any other agency of the federal government. This means you may not receive both tuition aid and VA assistance (under the provisions of the G. I. Bill) for the same course. You may, if you wish, alternate between the two assistance programs—you could receive tuition aid one semester, and the G. I. Bill the next.

Money for the tuition aid program is limited, so a priority has been established. First priority goes to career designated Navymen who are not eligible for the G. I. Bill. Second in line are Navymen who are not eligible for VA educational programs because they do not have the required two years of completed military service. If there is money left (as there often is), tuition aid may be received by career men who are eligible for both the G. I. Bill and for tuition aid.

When the course is completed, you are required to submit your grades to your Educational Services office. If—for reasons other than circumstances beyond your control—you withdraw from the course before completion, or if you do not earn a satisfactory grade, you will be required to repay the aid received for that course.



Education Via G. I. Bill

The **Veterans Readjustment Benefits Act** of 1966, commonly known as the Cold War G. I. Bill, offers educational benefits to most men who have been on active duty for more than two years. Unlike tuition aid, the G. I. Bill will pay tuition for most forms of off-duty study. But also unlike tuition aid, the G. I. Bill is limited to no more than 36 months of full-time college study.

You are eligible for the G. I. Bill while you are still serving on active duty if you have a minimum of 24 consecutive months of active service after 31 Jan 1955. In most cases this simply means that if you are on active duty at present, and have been on active duty for the last two years, you qualify.

There are, however, some exceptions. When computing that 24 months of consecutive service, you may not include any time spent attending the U. S. Naval Academy, serving on active duty for training as a Reservist, or during which you were assigned to a civilian school by the Armed Forces on a full-time basis and in which the curriculum was basically the same as that offered to civilians. In other words, you can't count time spent in programs such as NESEP, NROTC or ADCOP.

As a general rule, while on active duty you earn educational assistance at the rate of one month of assistance for each month of service, up to a maximum of 36 months' entitlement. When you attend school, you receive prorated subsidy, depending upon the amount of study you undertake.

For part-time high school or college, entitlement is used up on a one-quarter basis. For example, if you took one three-hour course, administered in a four-month semester, you would use one-fourth of your four-month entitlement: You would be charged one month's entitlement.

As shown in the box (at left), your educational benefits while on active duty will amount to \$130 per month or the total amount of tuition and fees, whichever is less. The payments are made each month, and computation can become quite complex—but for a simple example, if you paid \$40 tuition and fees for an acceptable course which lasted four months, you would receive a check from the VA for \$10 each of the four months. The payments are made on the 20th of the month following the month of entitlement: If you earned \$50 in benefits for the month of March, for instance, your check would be mailed to you on the 20th of April.

TO APPLY FOR educational benefits while on active duty, your first step is to submit the Serviceman's Application for Program of Education (VA form 21E-1990a), available at your Education office.

When submitting this form, you should set your sights high, as only one program change is permitted. For example, if you have a high school education and you wish to take one or two college courses, you would probably be wise to state your program or objective as the bachelor's degree. Similar advice would probably hold true for graduate study as well.

Cold War GI Bill Veterans Educational Assistance

Type of Program	Dependents			Each Over Two
	None	One	Two	
Institutional				
Full time	\$130	\$155	\$175	\$10
Three-quarter time	95	115	135	7
Half time	60	75	85	5
Less than half time or while on active duty	Payments computed at the rate of the established charges for tuition and fees or at the rate of \$130 per month for full-time course, whichever is the lesser.			
Cooperative training	105	125	145	7
Correspondence	Cost only. Paid quarterly.			

Full-time institutional training consists of 14 semester hours or the equivalent; three-quarter time consists of 10 to 13 semester hours or the equivalent; half-time training consists of seven to nine semester hours or the equivalent.

A cooperative program is a full-time program of education which consists of institutional courses and alternate phases of supplemental training in a business or industrial establishment.

A veteran who must complete high school training to qualify for higher education may receive educational assistance allowance without a charge against his basic entitlement. This also permits additional secondary school training such as refresher courses or deficiency courses needed to qualify for admission to an appropriate educational institution.

For additional information concerning farm, flight, apprenticeship and on-the-job training, see VA Pamphlet 20-67-1, August 1967.

After your application has been accepted by the Veterans Administration, the VA will mail you two forms. One is the Certificate of Eligibility, which will confirm that you are eligible for the G. I. Bill and will determine your maximum entitlement.

On the reverse of this form is an enrollment certificate, which must be completed and forwarded by the school to VA as evidence of your enrollment in the education program approved by VA.

The second form is the Certificate of Availability, which must be completed and approved by your administrative chain of command. This form certifies that you will be able to pursue a program of education and that the program will not conflict with your military duties. A new Certificate of Availability must be completed for each semester in which you receive VA assistance.

If you have trouble filling out either of these forms, you may receive assistance from your Educational Services Officer.

THE LIMITATIONS imposed on VA assistance are similar to those which apply to the Tuition Aid Program:

- Any course which is avocational or recreational in character will not be approved unless you submit justification showing that the course will be of bona fide use in your present or contemplated business or occupation.
- Flight training, other than a course given by an educational institution of higher learning for credit toward a standard college degree, will not be approved.
- Apprenticeship, or other on-the-job training, or institutional on-farm training will not be approved.
- Open circuit television or radio courses may not be

approved unless you are enrolled in a program, pursued in residence, which leads to a standard college degree, and which includes subjects offered through open circuit television, and the major part of which requires conventional classroom attendance.

• The educational allowance is not payable if you are enrolled in a course paid for by the United States under the provisions of any other law (including tuition aid) where the allowance would constitute a duplication of benefits from the federal treasury.

However, if the identity of such funds is lost by being combined with funds from other courses—which is the case in certain grants and scholarships—they are no longer considered a duplication of benefits. If you receive financial benefits other than from the G. I. Bill, the Veterans Administration must make a determination as to whether or not receiving both would constitute a duplication of benefits. (Incidentally, a veteran may receive both the G. I. Bill benefits and a National Defense Education Loan, as the former is an outright grant but the latter is a loan which must be repaid.)

• A change of program will not be approved if your original program was interrupted or discontinued due to your own misconduct, neglect, or lack of application. This restriction, however, may be removed if there is a reasonable likelihood that there will not be a recurrence of such an interruption or failure.

When you have been accepted by the VA and enrolled, you will receive each month a special VA card which you will complete on the last day of each month you go to school and mail to the Veterans Administration. In return you will receive a check for the amount to which you are entitled for that month.

VA Regional Offices Are Ready to Help You

If you are on active duty, you may obtain applications for Cold War GI schooling only from USAFI, at Madison, Wis. 53703, or from your Educational Services Officer. Ask for VA Form 21E-1990a.

However, whether you are on active duty or are a veteran, Cold War GI school information is readily available through any of several Veterans Administration Regional Offices scattered nationwide.

If there is no VA office near your present location, as a rule, local representatives of various veterans' organizations, in addition to the Red Cross, usually have such information available.

If you are a veteran, you may write to any of the VA regional offices listed below, or to USAFI, to obtain GI Bill education information and application forms. Here are the locations of VA Regional Offices.

ALABAMA Montgomery	FLORIDA Jacksonville Miami St Petersburg	LOUISIANA New Orleans Shreveport	NEBRASKA Lincoln	Cleveland Columbus	TENNESSEE Nashville
ALASKA Anchorage Juneau	GEORGIA Atlanta	MAINE Portland Tagus	NEVADA Reno	OKLAHOMA Muskogee Oklahoma City	TEXAS Dallas Lubbock San Antonio Waco
ARIZONA Phoenix	HAWAII Honolulu	MARYLAND Baltimore	NEW HAMPSHIRE Manchester	OREGON Portland	UTAH Salt Lake City
ARKANSAS Little Rock	IDAHO Boise	MASSACHUSETTS Boston Springfield	NEW JERSEY Newark	PENNSYLVANIA Philadelphia Pittsburgh Wilkes-Barre	VERMONT White River Junction
CALIFORNIA Los Angeles San Diego San Francisco	ILLINOIS Chicago	MICHIGAN Detroit	NEW MEXICO Albuquerque	PHILIPPINES Manila	VIRGINIA Roanoke
COLORADO Denver	INDIANA Indianapolis	MINNESOTA St Paul	NEW YORK Albany Buffalo New York City Rochester Syracuse	PUERTO RICO and VIRGIN ISLANDS San Juan, P.R.	WASHINGTON Seattle
CONNECTICUT Hartford	IOWA Des Moines	MISSISSIPPI Jackson	NORTH CAROLINA Winston-Salem	RHODE ISLAND Providence	WEST VIRGINIA Huntington
DELAWARE Wilmington	KANSAS Wichita	MISSOURI Kansas City St Louis	NORTH DAKOTA Fargo	SOUTH CAROLINA Columbia	WISCONSIN Milwaukee
DISTRICT OF COLUMBIA Washington, D. C.	KENTUCKY Louisville	MONTANA Fort Harrison	OHIO Cincinnati	SOUTH DAKOTA Sioux Falls	WYOMING Cheyenne



Correspondence Courses

SOME 15 or 16 years ago, the Navy adopted the idea of furnishing Navymen, both Regular and Reserve, with correspondence courses to guide them in their study for advancement in ratings examinations. Since then, it has worked out quite nicely, thank you.

Each year, some courses have been added, others dropped. Some have been revised or combined. There have been a number of changes made since the complete list appeared in the February 1963 issue of ALL HANDS. Below you will find a current list of correspondence courses.

Whether or not you check out a correspondence course is strictly up to you. However, any Navyman

who is interested in getting ahead will find it a smart thing to do because, basically, an enlisted correspondence course is simply a set of questions dealing with information contained in the Navy Training Courses.

The purpose of these questions is to help you get the most out of your study.

This is done by pointing out important definitions, the reasons things are done in one way rather than another, the cause and effect of various actions, the similarity or difference of certain objects, recognizing and identifying mistakes, and common principles which apply to more than one situation.

When you enroll in a correspondence course, which

An asterisk (*) following the title of a course indicates an officer/enlisted course. The abbreviation CONF indicates a confidential course; MH indicated modified handling; and RD stands for restricted data.

General Courses

NavPers Course Number	Course Title	Assignments	NavPers Course Number	Course Title	Assignments
91221-F	Advanced Mathematics, Vol. I	6	91577-A	Aviation ASW Technician 3 & 2 (CONF)	10
91224-D	Basic Electricity, Part I	6	91697	Aviation ASW Technician 1 & C (CONF)	11
91226	Basic Electricity, Part II	5	91678-A	Aviation Boatswain's Mate E 3 & 2	9
91228-1D	Basic Hand Tools	5	91672-A	Aviation Boatswain's Mate E 1 & C	7
91230-E	Basic Machines	4	91679-B	Aviation Boatswain's Mate F 3 & 2	7
91223-3	Blueprint Reading and Sketching	3	91680	Aviation Boatswain's Mate F 1 & C	4
10440	Disaster Control*	11	91636-1C	Aviation Boatswain's Mate H 3 & 2	5
91423-1	Enlisted Transfer Manual	5	91638-1	Aviation Boatswain's Mate H 1 & C	3
91505	Fld. Mfg. of Industrial Gases	12	91610-1E	Aviation Electrician's Mate 3 & 2	14
10439	Fluid Power*	6	91611-2A	Aviation Electronics Mate 1 & C	8
10444	Introduction to Naval Electronics*	5	91613-2	Aviation Electronics Technician 3 & 2 (CONF)	21
91258-A	Introduction to Sonar	4	91615-D	Aviation Electronics Technician 1 & C (CONF)	13
10448	Mathematics, Part I*	11	91633-1B	Aviation Fire Control Technician 3 (CONF)	12
10450	Mathematics, Part III*	14	91634-2A	Aviation Fire Control Technician 2 (CONF)	11
10445	Naval Electronics, Part I*	15	91635-2	Aviation Fire Control Technician 1 & C (CONF)	14
10446	Naval Electronics, Part II (CONF)*	10	91582	Aviation Machinist's Mate J 3 & 2	8
10447	Naval Electronics, Part III (CONF)*	7	91587-B	Aviation Machinist's Mate J 1 & C	7
91217-H	Standard First Aid Training Course	5	91368-A	Aviation Machinist's Mate R 3 & 2	9
91468-1F	U.S. Navy Shore Patrol	3	91608-1	Aviation Machinist's Mate R 1 & C	5
			91498-A	Aviation Maintenance Administrationman 3 & 2	4
			91499	Aviation Maintenance Administrationman 1 & C	7
			91665-2	Aviation Ordnanceman 3 & 2	17
			91662-1A	Aviation Ordnanceman 1 & C	7
			91674-B	Aviation Storekeeper 3 & 2	8
			91675-1A	Aviation Storekeeper 1 & C	8
			91622-1A	Aviation Structural Mechanic E 3 & 2	10
			91366	Aviation Structural Mechanic E 1 & C	5
			91365	Aviation Structural Mechanic H 3 & 2	6
			91367	Aviation Structural Mechanic H 1 & C	6
			91364-A	Aviation Structural Mechanic S 3 & 2	10
			91364-A	Aviation Structural Mechanic S 3 & 2	6
			(Supplement)		
			91650-1A	Aviation Structural Mechanic S 1 & C	7
			91243-2B	Boatswain's Mate 3 & 2	8
			91245-2B	Boatswain's Mate 1 & C	4
			91515-1	Boilermaker 1 & C	8
			91512-3	Boilerman 3 & 2	6
			91514-3	Boilerman 1 & C	7
			91584-2A	Builder 3 & 2	8
			91586-2	Builder 1 & C	5
			91441-1D	Commissaryman 3 & 2	6
			91443-2B	Commissaryman 1 & C	3
			91407	Communications Yeoman 3	10
			91569-2C	Construction Electrician 3 & 2	6
			91571-1E	Construction Electrician 1 & C	8
			91579-1C	Construction Mechanic 3 & 2	8
			91581-2B	Construction Mechanic 1 & C	6
			91544-2C	Damage Controlman 3 & 2	6

Basic Courses

NavPers Course Number	Course Title	Assignments
91600-C	Airman	11
91202-1C	Basic Military Requirements	5
91562-1E	Constructionman	5
91500-2C	Fireman	5
91206-E	Military Requirements for Petty Officers 3 & 2	6
91207-E	Military Requirements for Petty Officers 1 & C	5
91240-1E	Seaman	10
91691-1G	Stewardsman	3

Rating Courses

NavPers Course Number	Course Title	Assignments
91664-2	Aerographer's Mate 3 & 2	13
91603-1	Aerographer's Mate 1 & C	16
91676-1A	Air Controlman 3 & 2	9
91677-B	Air Controlman 1 & C	5

—A Self-Study Program



Navymen on active duty may do through their local commands, you receive a textbook (usually one of the Navy's famous blue books—green if you are in an aviation rating) and an assignment booklet.

The assignment booklet gives you study instructions and other information which will help you study the blue book. There are also questions (usually multiple choice) on the assignment, together with an answer sheet on which you mark what you think to be the correct answer.

The questions in the assignment booklet are not tests, only study aids. You can answer them with your book open, and should, to get the most out of the questions.

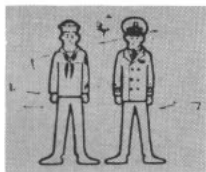
When you get all the questions answered, go over the assignment again to make sure you did your best.

When you mail your assignment for grading, it will be individually scored. Your answer sheet will be returned to you and, if you missed a question, references will be given to help you correct it. Your grade on the assignment will also be given.

Don't go overboard in your enthusiasm. You may take only one course at a time. Your first step will be to see your educational services officer, your division officer or personnel officer. You'll be told how to apply for the course.

Here's the list:

NavPers Course Number	Course Title	Assign- ments	NavPers Course Number	Course Title	Assign- ments
91546-1D	Damage Controlman 1 & C	5	91554-1C	Molder 3 & 2	6
91681-1B	Dental Technician, General 3 & 2	9	91556-1A	Molder 1 & C	8
91682-1B	Dental Technician, General 1 & C	9	91386	Opticalman 3 & 2	10
91686-1C	Dental Technician, Prosthetic 3 & 2	5	91389-1	Opticalman 1 & C	5
91687-1D	Dental Technician, Prosthetic 1 & C	5	91639-1B	Parachute Rigger 3 & 2	6
91689-1C	Dental Technician, Repair	5	91606-1C	Parachute Rigger 1 & C	6
91436-3B	Disbursing Clerk 3 & 2	7	91549-1A	Patternmaker 3 & 2	6
91438-3A	Disbursing Clerk 1 & C	4	91551-A	Patternmaker 1 & C	6
91524-1C	Electrician's Mate 3 & 2	6	91420-1C	Personnelman 3 & 2	6
91526-1B	Electrician's Mate 1 & C	3	91422-2	Personnelman 1 & C	5
91373-2C	Electronics Technician 3	9	91422-2	Personnelman 1 & C	2
91375-2	Electronics Technician 2	9	(Supplement)		
91376-C	Electronics Technician 1 & C (CONF)	8	91493-1	Photographer's Mate 3 & 2	20
91564-2A	Engineering Aid 3 & 2	14	91649-A	Photographer's Mate 1 & C	13
91566-2	Engineering Aid 1 & C	4	91592-B	Photo Intelligenceman 3 & 2 (CONF)	13
91519-2A	Engineman 3 & 2	9	91683	Photo Intelligenceman 1 & C (CONF)	10
91521-F	Engineman 1 & C	5	91401-3A	Postal Clerk 3 & 2	5
91574-2C	Equipment Operator 3 & 2	5	91460-1	Postal Clerk 1 & C	4
91576-2C	Equipment Operator 1 & C	6	91286-2A	Quartermaster 3 & 2	6
91339-1A	Fire Control Technician 3	9	91253-C	Quartermaster 1 & C	5
91340-1A	Fire Control Technician 2	6	91269-1A	Radarman 3 & 2 (CONF-MH)	11
91346-1	Fire Control Technician 1 & C	9	91268-C	Radarman 1 & C (CONF-MH)	7
91355-2	Gunner's Mate G 3 & 2	6	91403-1D	Radioman 3 & 2	6
91357-1A	Gunner's Mate G 1 & C	5	91405-3A	Radioman 1 & C	6
91379	Gunner's Mate M 3 & 2 (CONF)	6	91535-1C	Shipfitter 3 & 2	7
91380	Gunner's Mate M 1 & C (CONF)	8	91542-B	Shipfitter 1 & C	5
91377-A	Gunner's Mate T 3 & 2 (CONF-RD)	8	91447-1C	Ship's Serviceman 3 & 2	4
91378-A	Gunner's Mate T 1 & C (CONF-RD)	5	91450-C	Ship's Serviceman 1 & C	4
91669-3	Hospital Corpsman 3 & 2	7	91465-1B	Ship's Serviceman Barber Handbook	2
91671-1A	Hospital Corpsman 1 & C	8	91464-C	Ship's Serviceman Cobbler Handbook	2
91667-1C	Hospitalman	5	91466-E	Ship's Serviceman Laundry Handbook	3
91488-1	Illustrator-Draftsman 3 & 2	7	91463-1E	Ship's Serviceman Tailor Handbook	2
91383-C	Instrumentman 3 & 2	3	91291-E	Signalman 3 & 2	5
91385-1	Instrumentman 1 & C	7	91292-A	Signalman 1 & C	2
91529-1	Interior Communications Electrician 3 & 2	8	91261-1A	Sonarman G 3 & 2 (CONF)	7
91531-1	Interior Communications Electrician 1 & C	5	91259-4	Sonarman 5 3 & 2 (CONF)	6
91452-1A	Journalist 3 & 2	5	91265-A	Sonar Technician 1 & C	5
91453	Journalist 1 & C	3	91589-1C	Steelworker 3 & 2	7
91471-1	Lithographer 3 & 2	7	91591-1C	Steelworker 1 & C	6
91475-1E	Lithographer 1 & C	6	91693-2D	Steward 3 & 2	5
91274-1	Machine Accountant 3 & 2	7	91696-E	Steward 1 & C	3
91275	Machine Accountant 1 & C	4	91431-3D	Storekeeper 3 & 2	6
91507-2A	Machinery Repairman 3 & 2	8	91433-2B	Storekeeper 1 & C	4
91509-2A	Machinery Repairman 1 & C	8	91297-D	Torpedoman's Mate 3 & 2 (CONF)	7
91502-2A	Machinist's Mate 3 & 2	3	91299-1	Torpedoman's Mate 1 & C (CONF)	4
91504-D	Machinist's Mate 1 & C	5	91698-1A	Trademan 3 & 2	14
91335-2A	Mineman 3 & 2 (CONF)	6	91699-A	Trademan 1 & C	8
91337-2	Mineman 1 & C (CONF)	7	91594-2A	Utilitiesman 3 & 2	8
91360-2	Missile Technician 3 & 2 (CONF-MH)	8	91596-2A	Utilitiesman 1 & C	6
91361	Missile Technician 1 & C (CONF)	9	91414-3E	Yeoman 3 & 2	4
			91416-3B	Yeoman 1 & C	5



USAFI AT YOUR SERVICE

THE GOAL of the United States Armed Forces Institute (USAFI) is to help all members of the armed forces raise their educational level through a voluntary program of correspondence and group study courses.

To accomplish its purpose, the Institute offers more than 200 courses at pre-high school, high school, technical and college levels. In addition, 46 of the nation's leading colleges and universities participate in USAFI's educational program by offering over 6600 college level courses.

A Navyman enrolling in his first USAFI technical, high school or college level correspondence course is required to pay a five-dollar fee. This is one of the biggest bargains in the world for, as long as the student's progress is satisfactory, he may continue taking USAFI courses.

There is a separate fee schedule given in the NavPers 15819 series for correspondence courses offered by colleges and universities through USAFI. No charge is made for enrollment in group pre-high school or spoken language courses, or for any group study course using USAFI materials.

In addition to offering correspondence courses, the Institute also has a testing service. For non-high school graduate servicemen whose subse-

quent experience has enhanced their formal schooling, the Institute administers achievement tests to determine the prospective student's proper grade level. This test also provides a peg upon which to judge the student's progress during or after he receives instruction.

USAFI also administers General Educational Development (GED) high school-level tests. A Navyman who failed to complete high school before enlisting may take this test and, if he passes, receive a completion certificate. So far as the Navy is concerned, the man, if he passes, is then a high school graduate.

Navymen who want to obtain a diploma from the high school they previously attended can usually obtain one by making up required courses through USAFI study. Most state education departments will award High School Equivalency diplomas upon application, on the basis of GED tests.

The United States Armed Forces Institute also administers the general examinations of the College-level Examination Program, which a man may take to increase a previously established score in order to meet the higher standards of the military establishment.

All USAFI tests are administered locally by test control officers who

are appointed by individual commands. The tests are usually given by locally appointed examiners who are assisted by proctors. The tests are graded at USAFI headquarters in Madison, Wisc., or at overseas USAFIs. Achievement tests are graded locally.

Among the USAFI college-level courses offered to members of the armed forces are the courses of 46 leading universities and colleges which cooperate with USAFI in its correspondence program.

These courses may be taken for academic credit. Academic credit obtained through USAFI college courses, however, is not always transferable to other institutions of higher learning. Navymen working toward a degree and using USAFI courses should, therefore, consult the institution which will grant the degree concerning USAFI college courses and academic credit.

Local educational services officers should be able to provide interested Navymen with a list of available USAFI courses and supply a DD Form 305 for enrolling in the United States Armed Forces Institute.

After a Navyman takes all the courses he thinks he needs, USAFI will be glad to furnish transcripts of his grades to colleges or prospective employers. All he has to do is ask.



HAVE YOU CHECKED THE

SCORE?

DP IN NAVY parlance does not stand for Displaced Person.

Quite the contrary.

A Navy DP—data processing technician—is exceptionally well placed in our computer-age sea service.

Admittedly, there was a time when some of our DPs may have considered themselves displaced persons.

Why?

Because they initially served in some other rating to which they were less suited before converting to the DP rating, that's why.

This switch for some was made possible by the SCORE program, the Navy's Selective Conversion and Retention Program which tries to fit qualified junior petty officers and strikers into billets created by the ever-increasing demand for highly skilled enlisted technicians in the Navy.

Through SCORE, some of them received formal school training (which is guaranteed by the program) and, in some cases, automatic promotion to the next higher pay grade, based on individual academic standing.

There are at least 15 Navy ratings to which an individual may switch and reap beneficial schooling in the process. These ratings include ABE, AE, AQ, AT, BT, CT, DS, EM, ET, FT, IC, RD, RM, ST and DP.

While the process of conversion from one rating to another through the SCORE program is, in itself, a simple one, trying to explain the mechanics of doing so is another story.

TO BEGIN WITH, the program is actually aimed at those ratings which are considered to be crowded. Therefore, if you have not received any benefits from the STAR Program and are serving in one of the following crowded ratings, and would like to switch to one of those mentioned above, then SCORE could be for you.

Here are the "from which" source ratings the Navy feels can sustain a trimming: ABF, ABH, AD, AK, CYN, DK, DM, IM, LI, ML, MN, PC, PH, PR, PN, SH and TD.

If your rating is not included, don't give up. There is still another list of source ratings referred to as the Neutral List. It is comprised of AC, AG, AM, AO, AS, AX, AZ, BM, BU, CE, CM, CS, DC, DT, EA, EN, EO, GM, GMT, HM, JO, MM, MR, MT, MU, OM, PM, PT, QM, SF, SK, SM, SW, TM, UT and YN.

Convertees from Neutral List ratings, however, must meet specific conditions. For instance, individuals serving in ratings for which no variable reenlistment bonus is authorized may convert to any of the "to which" ratings only when eligible for reenlistment within three months of their expiration of active obligated service (EAOS).

Those persons serving in a VRB multiple rating, who are within one year of their EAOS, may request conversion to those "to which" ratings that offer a higher Variable Reenlistment Bonus award than the rating in which they are presently serving.

THE TERMS "junior petty officers" and "strikers" include pay grade E-3 identified strikers and third and second class petty officers. Incentives for conversion are offered to each of these three pay grades. For example, strikers may receive if eligible:

- Reenlistment bonus.
- Proficiency pay upon conversion.
- Variable reenlistment bonus.
- Guaranteed assignment to an appropriate Class "A" school.
- Immediate change of rating, or rating designator, upon satisfactory completion of Class "A" school.
- Automatic advancement to pay grade E-4, if eligible.

• Guaranteed assignment to an appropriate Class "B," "C," or an Equivalent "B" ("EB") school, following a period of on-the-job training in the new rating.

The same incentives are guaranteed pay grades E-4 and E-5, except second class petty officers cannot be automatically promoted to PO1.

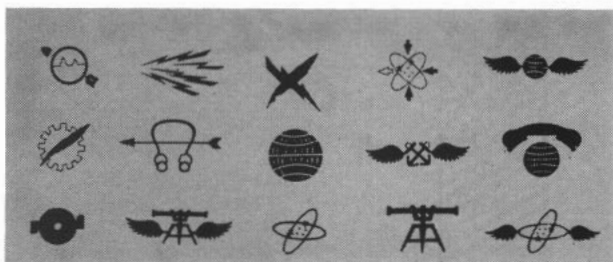
THERE ARE A NUMBER of eligibility requirements you must meet as a SCORE candidate.

First, you must have at least 21 months' active service either in the Regular Navy or Naval Reserve. In addition, you must not have more than 10 years' total active military service on record at the time of your application.

SCORE candidates obligate themselves for at least six years' service by extending, reenlisting or, in the case of Naval Reservists, enlisting under an active duty contract. Before doing so, however, they must obtain Bureau of Naval Personnel approval to convert to a specific rating.

Candidates must also meet the minimum test score





Ratings to which you may convert under SCORE.

levels for entrance into Class "A" schools. These levels usually consist of a combination of GCT, ARI, MECH and ETST scores ranging from 100 to 170. Requirements generally differ for each school.

Point waivers are not uncommon. In exceptional cases, a waiver of up to 10 points on a combined test score requirement, or a five-point waiver on a separate test score requirement, may be granted by BuPers.

If you should require a greater waiver, it is advisable that you request a retake of the basic test battery. Keep in mind that retests are restricted to individuals who have not previously been retested and who can furnish evidence of high school graduation or equivalency and a positive improvement in educational background. At least two years must have lapsed since you initially took the battery exam.

MILITARY CONDUCT is as important as your educational level. Individuals recommended for the SCORE program must meet certain minimum requirements. If you have any question as to your eligibility in this area, ask your personnel man to show you the behavior levels listed under Article D-2304 of the *BuPers Manual*.

If, while attending a SCORE incentive school, an individual becomes ineligible because of academic failure or misconduct, he will be dropped from the SCORE program and be expected to fulfill his obligated service time unless he's being discharged for administrative or disciplinary reasons.

Once you've been classified as a SCORE converttee, transfer to the appropriate Class "A" school related to your newly chosen rating will normally occur within 12 months after you submit a request for school. At any rate, you should submit your request for Class "A" and "P" schools four months before the class convening date.

There are two publications which list the Class "A" schools to which SCORE converttees are assigned. These pubs are the *Formal Schools Catalog*, NavPers 91769 series, and the *Navy Formal Schools Catalog*, Naval Air Training Command. Your Educational Services Officer or Career Counselor should have copies for reference.

If you are converting to a rating which requires a minimum of six years' training (or requires an individual to obligate himself for six years to receive such training), you will be assigned to a Class "C" or an "EB" school after completing Class "A" school.

UPON GRADUATING from these schools, however, you must first serve 18 months on the job before you may request assignment to a Class "B" school. At the time you enter the "B" school, you will be expected to meet your obligated service requirements as you will already have had your rating changed.

A significant SCORE program change of late deals with promotions from pay grade E-5 to E-6. If, after graduating from Class "A" school you are authorized advancement to E-6 as a result of passing a Navy-wide examination, you may do one of two things—change your rating at the E-5 level and waive advancement to pay grade E-6, or be advanced to E-6 in your present rating and be identified as an on-the-job trainee in the field to which you are converting, until such time that you can take an examination for lateral change of rating. Authorization to take this exam usually is granted by your supervisors when they consider you qualified in your new field of endeavor.

As an on-the-job Class "A" graduate, you must work in your new rating for at least one year, but not more than two years, as a trainee. Afterward, if your job performance has been satisfactory, you can expect to be assigned to a Class "B," "C," or an "EB" school within 12 months of the date you request such training.

Here again, just as with the requests for "A" and "P" schools, you should submit your request at least four months before the convening date of the school you want to attend.

Not every striker is going to receive an automatic promotion as icing on the Class "A" graduation cake, but advanced education is guaranteed to all those who complete their on-the-job training and are advanced to pay grade E-4 some time before their obligated service time with the SCORE program ends.

If you qualify and accept a school assignment (Class "B," "C," or "EB"), you must further obligate yourself to enough time in service to complete the training plus an appreciable length of time with the Fleet.

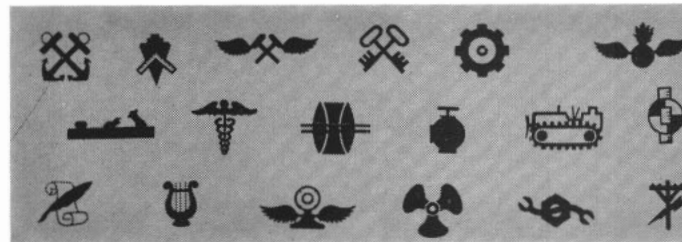
MAKE NOTE that for certain ratings Class "B" or "EB" schools may not exist. In this case, Class "C" training, if available, will be guaranteed in lieu of "B" or "EB," if requested by the individual. Automatic advancement to pay grade E-5 is not authorized to graduates of Class "C" school training.

There are a number of such stipulations surrounding the SCORE program's automatic promotion system which each SCORE candidate should be familiar with.

An E-3 striker, for example, may be automatically promoted to pay grade E-4 in the rating to which he is converting by the commanding officer of a Class "A" school provided he:

- Has met all the eligibility requirements noted in the *Manual of Advancement in Rate or Rating* (NavPers 15989).
- Has reenlisted or extended his present enlistment as required by SCORE guidelines outlined in BuPers Inst 1440.27B.
- Is a graduate of the Class "A" school with a final

These are ratings on the neutral list in SCORE program.



grade equal to or higher than the upper 50 percentile for the class (the percentile is computed quarterly based on the performance of U. S. Navy students of the applicable Class "A" school for the previous four quarters). Advancement is made effective upon graduation.

THOSE INDIVIDUALS in pay grade E-3 who are advanced to pay grade E-4 through Navy-wide competitive examinations are eligible for automatic advancement to E-5 if they satisfactorily complete Class "B" or "EB" school after their advancement to pay grade E-4 becomes effective.

An individual in pay grade E-4 may be promoted to E-5 by the commanding officer of a Class "B" or "EB" school provided the student meets certain requirements, such as being eligible according to the *Quals Manual*, and by having sufficient obligated service.

In the event the individual does not have sufficient time in pay grade to justify an automatic promotion, an entry should be placed in his service record indicating that upon completion of such required time, and when eligible, he may be advanced.

Some E-4 SCORE graduates from certain "EB" schools may be eligible for automatic advancement right now. The list of those "EB" schools may be found in BuPers Inst 1440.27B. Over 100 schools are listed which pertain to FBM, SSBN and nuclear power training, schools for FTs and GMs, and schools for STs, ETs and DSs.

Although retroactive advancements are not authorized, the effective date of advancement will be the date the CO actually makes the promotion. For individuals to be advanced automatically after 1 August this year they must pass the military leadership exam. No further examining is required.

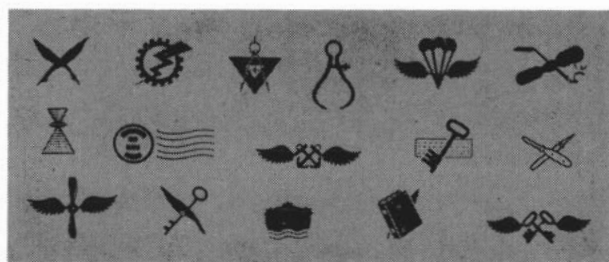
THERE IS ONE remaining thought concerning automatic promotions.

If you received an automatic advancement to pay grade E-4, you are not authorized a second automatic boost to pay grade E-5. You must earn this promotion through competitive Navy-wide examination.

Because the SCORE program opens the doors to many of the Navy's technological fields, it stands to reason only those individuals with sound potential should be recommended for conversion of ratings.

If you show signs of potential development, and are sincere in your wish to advance through another field of endeavor, then you are the man the Navy is looking for. Proper aptitude and motivation to succeed are the keynotes.

Once your mind is made up and you've been interviewed by your career counselor, you should immediately start the ball rolling by submitting a SCORE



Ratings from which you may convert under SCORE.

conversion request to the Chief of Naval Personnel (Pers-B2211). Be sure to include a special report of your enlisted performance evaluation with the request.

If your request is approved by BuPers, you will be discharged for the convenience of the government and immediately reenlisted in the Regular Navy for a term of six years. On the chance you have already reenlisted, then it may be only necessary for you to extend your present enlistment to give you the required obligated time to participate in the SCORE program.

FURTHERMORE, it may be possible for you to receive a variable reenlistment bonus if you are eligible for a first reup bonus and complete your conversion process before your extension becomes effective.

As mentioned before, Naval Reservists on active duty for two years are also eligible to take advantage of the SCORE program. They should begin their processing for conversion at least 90 days before the expiration date of their term of active duty. This will allow adequate time to process their requests.

Time, as usual, is a major factor, especially if you lack proper security clearance or other requirements for the rating to which you want to convert. If you do, you must then request an appropriate clearance according to the guidelines set down by BuPers Inst 5510.3 series.

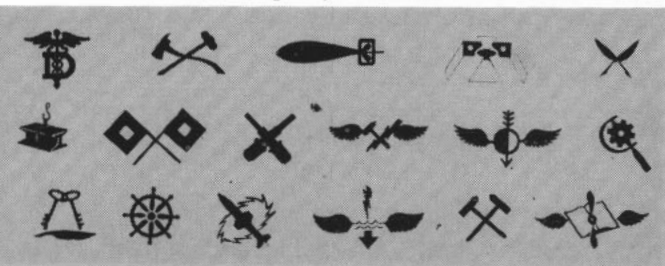
Every effort will be made to direct you toward the primary rating of your choice. However, there are times when SCORE applicants must, out of necessity, be geared to an alternate rating. This is why every applicant must indicate an alternate rating in which he would like to serve. For example, when requesting conversion to the CT rating, the alternate conversion choice should be a rating other than another Class "A" school within the CT rating.

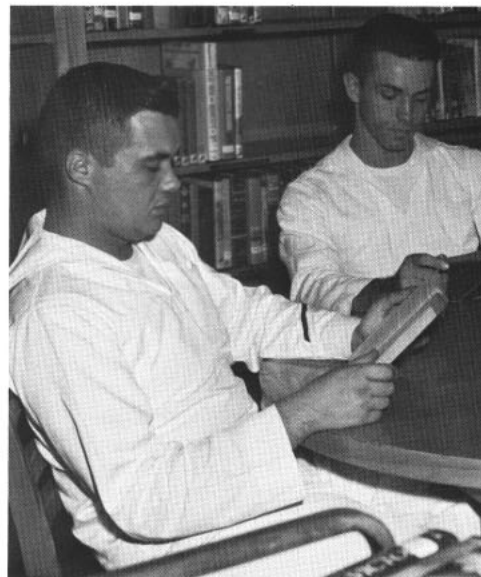
ONE OF THE BEAUTIES of switching ratings through the SCORE program is the opportunity of working in the rating to which you are converting before you are assigned to a school. This procedure is followed by all commands whenever possible.

This information has been aimed at the individual who might be qualified for the SCORE program. Perhaps you know of someone whom you believe to be ill-suited in his present job but would excel in another. If so, bring the SCORE program to his attention.

If you are a senior petty officer or division officer, keep an eye open for such individuals, during reenlistment interview sessions in particular. There may very likely be "displaced persons" serving in your unit who are eligible in all respects for the SCORE program, but lack proper guidance in planning their careers. Don't allow them to become short-timers. Aim them in the right direction and SCORE.

EMs in these ratings may convert under certain conditions.





HANDBOOKS—Navy libraries aboard ship and on station are well stocked with books for pleasure or knowledge.



TALKING 'BOOKS'—Navyman studies language in station library. Below: Library facilities have come a long way since this photo was taken in 1923.



BOOKS:

THIS IS THE AGE of education. But education can be informal, and what's more, it can be relaxing and fun. That's why the Navy has more than 1300 general libraries of which some 800 are aboard ship.

Reading, and particularly the reading of books, is basic to education. It is the skill most essential in self-improvement and personal advancement. Books are the most compact, most available and economical form for storage and distribution of knowledge.

The U. S. Navy very early in its existence recognized the need for and the utility of books aboard ship where limited space and long periods without shore leave created difficult morale and educational problems.

For these reasons every U. S. Navy ship and shore station has within the command a crew's library containing books whose subject matter ranges from science and technology through the classics to popular mysteries and westerns.

This has been true of all the Navy since the days of World War I, but the foundation of Navy libraries goes back much further, back to the early 1800s.

The first U. S. ship of the line to carry a library was probably the 74-gun *uss Franklin*. Her officers and crewmen contributed about \$800 to get their "Seaman's Library" started with some 1500 books.

NAVYMAN uses reference book to help with USAFI course. *Right: Library aboard USS Ranger becomes study center.*



Shelves were built in a section of the ship and a librarian was appointed for care of the books before the ship departed New York for a three-year cruise in the Pacific. When *Franklin* returned in 1824, what was left of the book collection was turned over to the Brooklyn Navy Yard to become the nucleus of a seaman's library there.

In 1828, the Navy issued the first list of books to be furnished at public expense for ship and yard use. Included were, among others, the *Encyclopedia Britannica*, still popular, Gibbon's *Decline and Fall of the Roman Empire*, and Euclid's *Elements of Geometry*.

From that point in time, the growth of the library system has been steady if unspectacular. Herman Melville, seaman during 1843-44, found that his ship's library was kept in a cask in charge of a marine corporal. To see what the library held, the contents of the cask had to be dumped on the deck. This made the corporal "cross and irritable" and probably discouraged the timid.

WORLD WAR I saw the Navy come of age. Many shore installations were built and the Fleet was

FOR PLEASURE AND KNOWLEDGE

enlarged and modernized. To keep pace, expansion of the library system was required. Demands were heavy, so the library program was placed under separate administration. This office—now the Library Services Branch, General Military Training and Support Division, BuPers—continues to administer the program today.

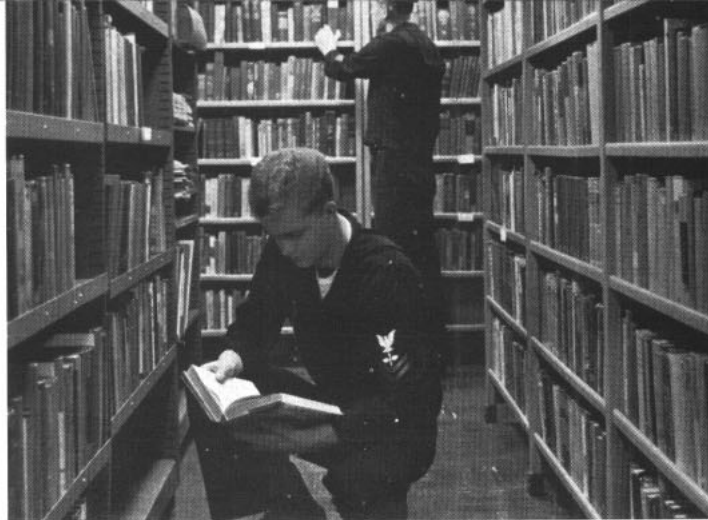
The Library Services Branch sees that each new ship or station receives a basic assortment of all kinds of books. The initial collection is figured roughly on a basis of one and one-half books per man aboard ship, and of a minimum of two books per man at shore stations. To keep the collection up to date, the Branch continues to supply these libraries with newly published volumes and to replenish libraries which are depleted.

How does the Branch know which books to buy? Books are reviewed by experts who provide the Branch with estimates of worth and readability. Personnel of the Branch have, over the years, developed a special knack for finding books of particular interest to Navy-men. Final decision is based on the reviews, on previous selections, on the money available, and so on.

Since most books are selected and purchased before their official publication dates, Navymen overseas usually have an opportunity to read new books almost as soon as the people back home do.

Not all Navy libraries receive all the books selected and purchased. Usually about 600 copies of each cloth-bound selection are distributed, primarily on a monthly basis, among the 866 ships and 234 naval shore stations located worldwide which are on the clothbound book distribution list.

Some smaller ships—about 300 in number—receive hardbound allotments semiannually. All ships and selected shore activities receive monthly paperback book



shipments as well. All told, the annual distribution, Navy and Marine Corps, amounts to an average of one million books, hardback and paperback, non-fiction and fiction.

What are some of the books recently selected? Here is a sampling from the current list which shows the wide range, from highly technical to pure good humor, exhibited in the selections:

Non-Fiction

Myths of the Space Age, D. Cohen
Love and Sex in Plain Language, E. W. Johnson
Fundamental Principles of Physics, F. Constant
Fall of Japan, W. Craig
Thinking Man's Guide to Baseball, L. Koppett

Fiction

Timelock, D. Cory
One More River to Cross, W. Henry
Red Chinese Air Force Exercise, Diet, and Sex Book, W. R. Hirsch
W.A.S.P., J. Horwitz
Playboy Book of Humor and Satire, Playboy

Usually the list contains about 100 titles, enough to inundate the most ardent reader if he were to tackle them all. However, used wisely, the Navy's general library resources will support practically any line of study; used regularly, they will make for a better Navy. In the reading of good books, pleasure and learning merge and become inseparable.

OVER THERE—Corpsmen and patients use library set up in native style hut while on duty in Vietnam.





THE GREAT NAVAL OPPORTUNITY:

NO ONE likes being second best. That's why man seeks every opportunity to better himself.

Still, there are those who just don't recognize opportunity when it presents itself, or have an attitude that willingly lets opportunity pass them by.

You are one of the lucky ones. You recognized opportunity and grasped it with determination. Now that inward drive has led you to one of the Nation's foremost means of combining an education and a career—an appointment to the United States Naval Academy.

The grounds, or Yard as it is known, look considerably different from the aerial photo in the Academy's catalogue of information. But you may be assured it looks different to all the other arrivals approaching Number One Gate.

Like yourself, they are carrying a set of orders which directed them to report to the U. S. Naval Academy for admission as midshipmen. It was for this moment that you spent the past nine months at the Naval Preparatory School in Bainbridge, Md. Plans, correspondence, interviews, examinations and long hours of study led you there. Remember?

IT ALL BEGAN less than a year ago. You had been in the Navy about a year and had just been advanced to

PO3, another good reason to celebrate your 19th birthday which came a week later.

Like most young sailors showing promise of sound leadership, you had gained the attention of your division officer. He asked if you had ever considered applying for any of the officer programs.

Sure, you'd thought a lot about them. But, what chance would someone have with only a high school education? To become an officer in today's Navy requires considerably more.

Precisely. And how better to receive an advanced education than through the Navy? For instance, Annapolis?

And so you watched the first grains of sand begin to flow through your naval career hourglass. You found out your scholastic standing in high school was sufficiently high to meet the entrance requirements of the Academy. Furthermore, your commanding officer gave you an outstanding recommendation which, together with your letter of application, was submitted to the preparatory school and the Naval Academy for consideration. No need to remind you how it felt to be nominated.

To allow you to brush up on study habits, formations and drill routines, you were sent to the Navy's "Prep"

school. That "brush up" lasted nine months, during which you took and passed the College Entrance Examination Board tests, a prerequisite must for midshipman candidates.

NOW THAT'S ALL behind you, and you stand on the threshold of a time-honored career.

For you and the other enlisted sailors and marines, the transition will be easier. You've been on your own the past year whereas many of the soon-to-be midshipmen, who arrive a day later, are fresh out of high school. This may well be their first break from family.

The civilian nominees represent a wide variety of the home-town boy. Some will arrive by limousine, others by bus, train and private car. There have been those who reportedly hitchhiked across country to Annapolis.

Sons of sailors, soldiers, doctors, lawyers, farmers, and a hundred other professions, their backgrounds are just as varied as their dress. But this Scotchplaid appearance will disappear overnight and you will sense among you a unity of purpose, a cohesion that will last through four years.

According to the brochure at hand, Bancroft Hall, home of the entire Brigade of 4000 midshipman, is where your check-in process begins. You may be awed by its magnitude. Housing 1873 rooms, it is the largest single dormitory in the U. S., and very likely the world.

AS YOU MAKE your way toward the hall, look around.

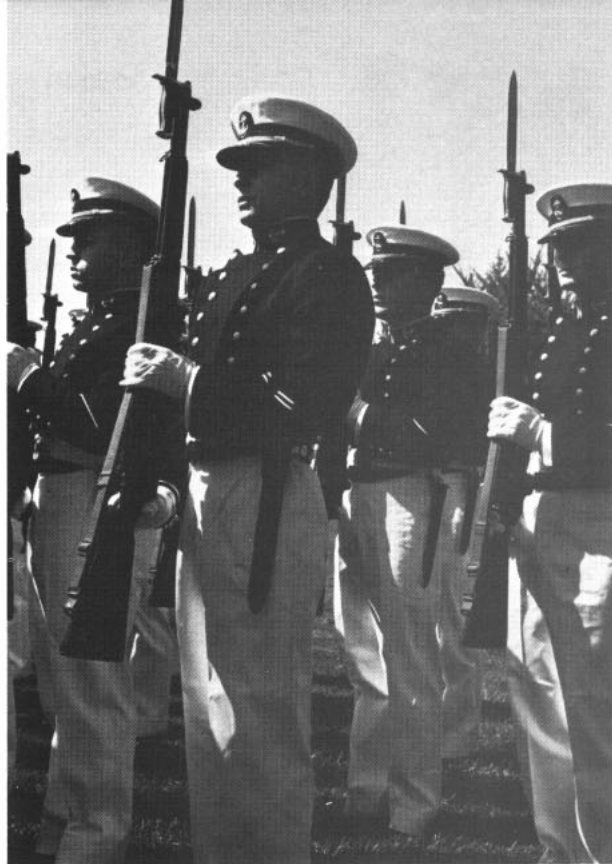
All those ancient-looking guns scattered over the 300-acre Yard are spoils of war: the Mexican, the Civil, the 1900 Boxer Rebellion in China, the Spanish-American and World War II. Nowhere else in the country will you find such a picturesque nautical setting.

ACADEMY

Inside Bancroft Hall, in the Brigade library, you will hand over your admittance papers, and the \$300 you saved will be deposited. This money serves as a deposit toward your initial outfitting. Thereafter, a proportionate amount of your \$151 monthly pay will go toward clothing and other essentials. The \$1.35 daily ration credit you receive will go directly toward your mess bill, something you will continue to pay as an officer.

You need not worry about starving at the Academy even though your ration allowance is less than 50 cents a meal. Over-all, the midshipmen's consumption of food is astronomical. Each day 4800 quarts of milk and 1500 loaves of bread are consumed. And within a week, the Brigade puts away 12,000 pounds of beef, 18,000 pounds of potatoes, 10,500 pounds of fresh and frozen vegetables and 1200 gallons of ice cream. The Academy has its own dairy, located nearby Annapolis, which produces 1300 gallons of milk daily. All told, the cost for feeding the 4000 midshipmen each week amounts to over \$38,500.

When you return to Bancroft proper you will be assigned to a summer Plebe battalion, a specific company and squad, and be given an armful of literature including manuals titled *Fourth Class Summer*, and *U. S. Naval Academy Regulations*. With these im-



PRECISION—Midshipmen present arms during parade.

portant pubs in hand you will proceed to your company area to be assigned a room from where you'll be guided through the remainder of Induction Week.

THE ROUTINE will probably be reminiscent of your boot camps days—haircut, outfitting of uniforms, bedding, and book issue.

But there is one distinct difference: the ceremony in which you take your oath of office and are sworn in as a midshipman in the U. S. Navy. (*Continued on page 36*)

LOTS OF LEARNING—Curriculum consists of at least 137 semester hours resulting in Bachelor of Science degree.



NAVY EDUCATIONAL OPPORTU

DURING THE PAST fiscal year, there were an astounding 619,179 enrollments in various types of formal Navy schooling. Enlisted men accounted for 542,651 of these enrollments with officers accounting for the 76,528 remaining.

It is estimated that over 90 per cent of all naval personnel ashore and afloat were involved—in the past year—in some form of self-study courses.

In the sea service, on-the-job-training approaches 100 per cent participation—an essential requirement for specialized personnel in the electronic, supersonic and nucleonic Navy.

The response on the part of officers and enlisted men to the Navy's educational program serves to point up the Navy's long range educational objectives.

These are the Navy's continuing goals in education:

- That all Navy enlisted personnel entering the Navy without a secondary school education have the opportunity to earn at least a high school diploma or equivalent.

- That all career-designated, career-motivated enlisted personnel who are qualified to pursue an advanced educational program, have the opportunity to continue their formal education leading to an associate degree.

- That all commissioned officers have an opportunity to earn a baccalaureate degree, and further, that personnel demonstrating the qualifications have an opportunity to work on advanced, graduate programs commensurate with their military duty assignments.

EVALUATION OF SERVICE EXPERIENCE

—This is possible for naval personnel through CASE, the Commission on Accreditation of Service Experience. CASE is a civilian organization which evaluates Navy education in relationship to civilian institutional requirements.

An institution of learning is the final judge of how much academic credit can be allowed to any student which it accepts for enrollment. CASE, therefore, can only recommend Navy education which, in its opinion, merits academic credit. Such recommendations are frequently taken at face value. In any event, CASE is influential in persuading colleges to give Navymen academic credit for the education they obtain through their Navy experience—academic and otherwise, on-the-job training, self-study courses, schools, and job know-how.

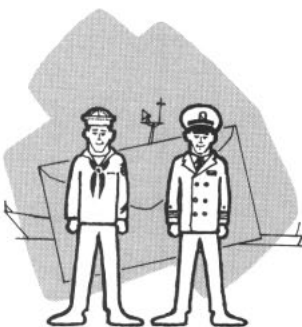
A course, to be considered by CASE, must be three weeks or longer in duration. Navymen who wish to receive credit for their Navy educational activities should first contact the school in which they are interested which, in turn, deals with CASE.



USAFI—This is a broad service-wide educational program in which there were about 60,000 Navy enrollments last year. The United States Armed Forces Institute offers both high school and college level courses to all military personnel by means of correspondence.

Detailed information on USAFI courses available can be found in current editions of the USAFI Catalog and Correspondence Courses Offered by Colleges and Universities Through the United States Armed Forces Institute. More than 6000 courses are offered by 46 colleges and universities in this program.

Successfully completed high school courses can be applied toward a high school diploma or its equivalent. Many of the USAFI college courses can be taken for academic credit.



ON-THE-JOB TRAINING—

This highly effective type of training is the oldest method employed by the Navy to promote career development and is offered usually in conjunction with other programs. Commanding officers are instructed to sponsor on-the-job training programs to help those in their command prepare for advancement. As one example, about 26 per cent of all Navymen trained at the Class "A" school level acquire their knowledge and skills by actually learning on the job.

The Chief of Naval Personnel provides manuals, blue books and correspondence courses to assist on-the-job training programs as well as promoting such new training techniques as programmed instruction.

Aboard ships at sea there is some aspect of training going on 24 hours a day. Navy ships spend more than half their time in training functions, and naval personnel—officer and enlisted—are "in training" throughout their Navy careers.

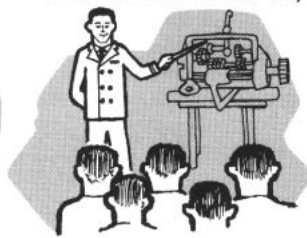


NAVY VOCATIONAL TRAINING SCHOOLS—

These include Class "A," "B," "C," and Functional schools.

BuPers Class "A" schools provided basic rating training to over 40,000 men in fiscal year 1967 while 14,000 entered OpNav-sponsored aviation "A" schools and 10,000 entered the BuMed-sponsored medical "A" schools. Thirty-seven BuPers "B" schools trained 6000 career petty officers in advanced rating subjects during fiscal year 1967. The Class "C" schools provide specialized training on particular equipments for a rating or in a skill not required of everyone in a rating and which may be common to two or more ratings. Forty thousand enlisted personnel entered the 57 BuPers "C" schools in 1967.

Functional schools provide training in a group or team situation and in performance of specialized tasks or functions which are not normal to rating training and, additionally, on weapons and equipment of new or advanced design. Nuclear Power School, Vallejo, is one of 15 BuPers functional schools. They



LANGUAGE STUDY—

The world-traveling Navyman has a better than average opportunity to learn foreign languages. Language materials are usually offered as self-study measures to Navymen who are bound for foreign ports. The courses provide useful phrases to help Navymen communicate.

USAFI also offers regular self-study language courses for high school and college credit. No preliminary courses or knowledge are required for enrollment.

Dictionaries and other supplementary language material are available through the Navy.

The Defense Language Institute offers crash courses to selected officers and some enlisted men whose work requires linguistic fluency.

Language courses are often offered at overseas bases to Navymen who are permanently stationed in foreign countries. These are usually taken without academic credit from teachers provided by the Instructor Hire Program.

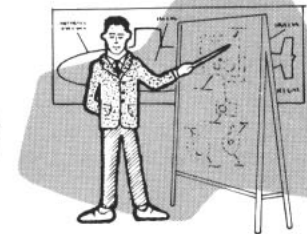


INSTRUCTOR HIRE PROGRAM

—Provides funds to employ teachers for classes in order to satisfy individual or command requirements. Instruction of this type is usually authorized at both high school and college level and is usually located at naval shore activities. The program may provide courses which are open to officers, enlisted men and, frequently, their dependents.

Any academic credit for courses taken under the Instructor Hire Program must be negotiated by the command or the individual. Most are given without credit to increase a Navyman's effectiveness to his command and to give him personal satisfaction.

There is a related program called PLUS (Program Learning Under Supervisor). It is used for tutoring individual Navymen in a special subject for a special purpose. It differs from the Instructor Hire Program in that individual instruction rather than group learning is employed. It is available to both enlisted men and officers when deemed necessary.



ACTIVITIES for Enlisted Men and Officers

have a combined enlisted input of over 35,000 annually.

The 22 Fleet Training Centers and activities commanded by the Fleet Commanders and supported by BuPers provide precommissioning, refresher, and team training to some 227,000 enlisted personnel annually.

Some 53,000 Regular and Reserve officers also receive instruction in Fleet and functional schools each year.

NAVY TRAINING MANUALS—

Blue Books, as they are called, help give enlisted men the knowledge they need to work in their pay grade. They are a must for any enlisted man who wants to advance in his rating.

Actually the books come in two colors: Blue for non-aviation ratings and green for aviation types. There are about 100 blue books covering approximately 60 non-aviation ratings and more than 40 green books for men in 17 aviation ratings.

There are also about 35 special training manuals and supplements which cover general subjects of interest to Navymen.



NAVAL PREPARATORY

SCHOOLS—These schools provide concentrated pre-college academic education for selected active-duty Navymen to prepare them for entrance to the Naval Academy and/or Navy Enlisted Scientific Education Program colleges. The preparatory courses are nine months for the Naval Academy candidates and nine weeks for the NESEP appointees. Naval Academy candidates and those NESEP appointees from East Coast ships and stations are usually enrolled in the Naval Preparatory School, Bainbridge, Md. NESEP appointees from West Coast ships and stations receive their preparatory instruction at the Naval Training Center, San Diego, Calif.



STAR (Selective Training and Retention)—Program is for those who step forward early to be recognized as career Navymen. Although the program is designed primarily for enlisted men in the electronics-oriented ratings, it is open to other eligible men. In all, 32 rating specialties are eligible.

Those who meet the requirements place themselves in line for a Navy school, a bonus and rapid advancement.

Candidates should have completed between one and three years of active duty and must be willing to obligate themselves for six years after their first enlistment.



U. S. NAVAL ACADEMY—

Each year, the Secretary of the Navy may appoint 85 enlisted men of the Regular Navy and Marine Corps to the Naval Academy. A similar number of Reservists are also appointed. Candidates must be under 21 years of age on 1 July of the year they enter the Academy.

Active-duty Navy and Marine Corps applicants compete for the available appointments and are sent to a Naval Preparatory School where their academic abilities are sharpened.

Selections are made each spring, therefore prospective students should apply through their commanding officer early in the year. Because of the 21-year limit on age, recruits are especially encouraged to apply for entrance to the Academy.

Navy juniors, that is, sons of Naval and Marine Corps personnel, are also encouraged to apply for admittance to the Academy through various procedures such as presidential or congressional appointments.



SCORE (Selective Conversion and Retention)—Program is good news for men wishing to replan their Navy vocational careers, transferring from rates where advancement is not as rapid as in the rest of the Navy.

SCORE permits conversion of eligible personnel from slow-moving rates to open, critically undermanned ratings. It is available to pay grades E-3 through E-5. The program requires between two and 12 years of active duty, and candidates must also be in certain ratings and meet the requirements for Class "A" school training.

The program offers assignment to "A" school, immediate change of rating, automatic advancement to pay grade E-4 for strikers graduating in the upper half of their class, guaranteed "B" school, reenlistment bonus and automatic incentive pay.



NESEP (Navy Enlisted Scientific Education Program)—This provides a four-year college education for successful candidates selected from among petty officers who have at least three years of high school and the following test scores: GED—75th percentile in each area; GCT plus ARI basic battery score of at least 118.

There are 22 colleges and universities participating in the program. Candidates must have a record of constructive learning through correspondence courses and other after-hours educational activity. Selectees first obligate themselves for six years of service after NESEP graduation and are sent to a Naval Preparatory School for refresher training in college academic requirements.

After completing their NESEP training, graduates are sent to OCS (Officer Candidate School) after which they are commissioned.



NAVY CORRESPONDENCE

COURSES—These cover all the technical and professional subjects needed by officers and enlisted men to advance their professional knowledge on a self-study basis.

Navy correspondence courses are not only checked out, they are usually completed. The Navy, by far, has a higher completion rate for its courses than any of the other services and all commercial courses.

The U. S. Naval Correspondence Course Center, Scotia, N. Y., is the program's main administrative activity. The "List of Training Manuals and Correspondence Courses" (NavPers 10061-Z) contains complete information on courses available and how to order them.

Currently there are 230 Navy correspondence courses for enlisted personnel, and 103 for officers.



NROTC—The Naval Reserve Officers Training Corps supplements the U. S. Naval Academy in training Regular Navy Officers. The regular program provides a paid four-year college education at one of more than 50 colleges and universities, plus a Navy commission. There is also an NROTC contract program (which does not pay for tuition or basic educational costs) leading to a commission in the Naval Reserve.

Candidates must be unmarried high school graduates between 17 and 21 years of age who are willing to spend four years in the training program.

Appointments are made on the basis of a competitive examination and education is fully subsidized. Reserves on inactive duty and civilians may apply for the program. Active-duty Navymen are eligible to compete but must do so through their home state since there is no quota for selection of active duty personnel.

Regular NROTC students are appointed midshipmen in the U. S. Naval Reserve until graduation, when they are commissioned in the Regular Navy upon graduation.



NAVY EDUCATIONAL OPPORTUNITIES

OCS (Officer Candidate School)—is the largest single source of officer personnel in the U. S. Navy. It offers a Naval Reserve commission to college graduates following a 16-week concentrated indoctrination course at Newport, R. I. While they are students, the candidates receive the pay of an E-5 and incur an active duty obligation of three years after they are commissioned.

This program is a major source of Naval Reserve officers, most of whom receive commissions in the unrestricted line, although some are assigned to duty with the Staff Corps.

AOC-PILOT TRAINING—The Aviation Officer Candidate program offers pilot training to college graduates between 19 and 26 years of age who have three and one-half years of obligated service. Enlisted personnel on active duty who meet the requirements may apply for this program.

Aviation officer candidates are also selected from civil life and paid at the E-5 rate. Students are commissioned upon completion of flight training.

There is also an NAOOC Program which trains navigators, bombardiers and other air officers who are not pilots. These men, who participate in part of the training available through AOC, are provided specific indoctrination in their specialty at aviation ground school.

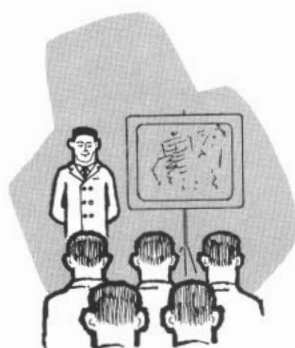
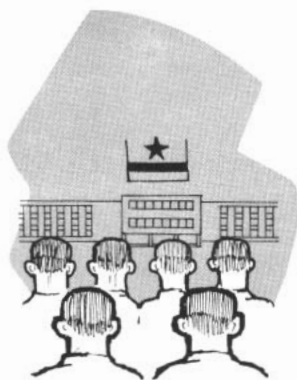
The last classes in the NavCad Program (for non-college applicants for aviation training) have recently been graduated and that program has been closed. The Navy now expects the AOC program to meet its current needs.

PACE (Program for Afloat College Education)—Originated for crews of FBM submarines as the Polaris University Program. It has now been extended to certain surface ships and shore installations. Courses consist of videotaped lectures and materials to be studied at sea. Examinations are given ashore under auspices of Harvard University, the Universities of South Carolina and Hawaii and San Diego State College which sponsor courses. All Navy high school graduates are eligible if they are in Fleet ballistic missile submarines operating out of New London, Conn., Charleston, S. C., and Hawaii, and to crews of selected surface ships operating out of Boston, Newport, R. I., and San Diego.

Navymen who complete the courses in the PACE program will have the equivalent of a two-year college extension education.

TUITION AID—This program provides payment of a straight 75 per cent of the tuition expenses of both Regular and Reserve student Navymen on continuous active duty. The program encourages study on off-duty hours at Navy-approved high schools, colleges and universities. Non-credit preparatory courses can be approved for tuition aid if the courses require the student to attend class; if they require homework or class study assignments; and if completion depends upon passing a final course test. Students taking college work may take a maximum of seven hours a semester.

Enlisted men receiving tuition aid incur no service obligation. Commissioned officers, however, must agree to remain on active duty for two years after completion of the courses for which aid is given.



OFFICERS' DEGREE COMPLETION PROGRAM—Gives officers who need a year or less to complete residency work on a bachelor's degree an opportunity to do so. The Navy gives the participating officers time off from their official duties to devote full time to academic study at an approved civilian college or university while receiving full active duty pay and allowances.

Although officers enrolled under this program remain on the Navy payroll, the expenses incident to their education come out of their own pocket unless they take advantage of the GI Bill or similar programs.

Students must make their own arrangements, however, if they wish to receive educational financial aid from the government.

Officers who participate in this program obligate themselves for two years of service for one year of education.

NAVAL POSTGRADUATE SCHOOL—PGS offers an opportunity for qualified officer personnel to receive specialized education leading to an MA, MS or PhD degree.

Applicants who are chosen are sent to the Naval Postgraduate School at Monterey to study subjects which will benefit the Navy as well as the student. Students usually require one or two years to complete their work at the school, although some are retained beyond that time for advanced study. Officers obligate themselves for two years of service for each year of education they receive.

Officers who request postgraduate studies on their preference card are made available by their detailer for consideration by the Postgraduate Board which meets each July.

THE NAVAL WAR COLLEGE AND OTHER ARMED FORCES COLLEGES—The Naval War College at Newport, R. I., is the oldest of its kind in the United States, having been founded in 1884. Together with the other U. S. Armed Forces Colleges, it offers advanced military courses to junior and senior officers. Officers with at least 10 years of commissioned service are chosen for the Naval War College by selection board on basis of performance.

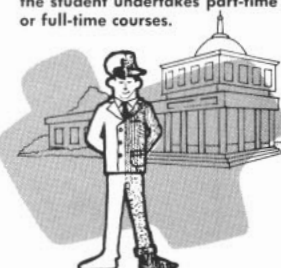
In addition to the Naval War College, there are the following Armed Forces Colleges in the United States: The Armed Forces Staff College at Norfolk, Va., The Industrial College of the Armed Forces, the National War College and the Inter-America Defense College, all at Fort McNair, Washington, D. C., The Marine Corps and General Staff College at Quantico, Va., The Army War College at Carlisle Barracks, Pa., The Army Command and General Staff College at Fort Leavenworth, Kan., the Air War College and the Air Command and Staff College, both at Maxwell AFB, Montgomery, Ala.

COLD WAR GI BILL—Officially known as the Veterans Readjustment Benefits Act of 1966 (Public Law 89-358), the program offers educational benefits to Navymen in college undergraduate, graduate and vocational training.

In-service Navymen who want to take advantage of this program must have been on active duty at least two years to be eligible. This will put you in line for up to 36 months of education which is equivalent to four school years of nine-month sessions. Those who are eligible may receive this training while on active duty.

Retired personnel and former servicemen who meet the eligibility requirements may take advantage of the educational benefits under the GI Bill at approved educational institutions.

Navymen earn one month of educational assistance for each month of active duty served up to 36 months of full-time study. Financial assistance is prorated, depending upon whether or not the student undertakes part-time or full-time courses.



for Enlisted Men and Officers (Cont.)

ADCOP—The Navy's Associate Degree Completion Program (sometimes called the Junior College Program) gives qualified career-designated enlisted Navy-men an opportunity to obtain an associate degree.

Academic work is taken at approved civilian institutions and is completely financed by the Navy except for room and board, for which participating Navy-men receive a subsistence allowance. Participants, in addition, receive full active duty pay and allowances while attending school, thus enabling them to maintain household and family living expenses during this period.

ADCOP is aimed at providing Navy-men with a better appreciation of the quality of American life as well as increasing their value to the Navy and improving their chances for advancement.

Inputs to the pilot program were 75 men in fiscal year 1967 and an additional 75 men in fiscal year 1968. Continuing evaluation of pilot classes during several years of operation will form the basis for determining possible future expansion of this program.



NAVY LIBRARIES—There are more than 1300 Navy general libraries of which some 800 are aboard ship. Contained in these libraries are well over a million books, most of them distributed through the Library Services Branch of BuPers.

This wide range of reading material, from the classics to current best sellers, both non-fiction and fiction, affords a continuing opportunity for interested Navy-men to enjoy their leisure time and to put it to good use.

Ship libraries range in size from those aboard submarine chasers (PC) with approximately 150 books (hard cover and paperback) to carrier libraries of 8000 to 12,000 books. Shore libraries exhibit less variation in size with the average collection consisting of about 15,000 books.

The popularity of the sea-going libraries is attested to by the constant circulation of their books.



UNDERGRADUATE EDUCATION PROGRAM—For the purpose of raising the educational level of certain naval officers who do not hold a baccalaureate degree.

Candidates considered for this program are unrestricted line or Supply Corps officers in the grades of lieutenant (jg) to lieutenant commander who have not failed of selection. Candidates must also possess the required academic prerequisites and have not reached their 40th birthday when the selection board meets.

Officers who wish to be considered for this program should so indicate on their preference card. Applications for undergraduate education may also be addressed to the Chief of Naval Personnel (Pers-C312), Navy Dept., Washington, D. C. 20370. Those who are selected are sent to the Naval Postgraduate School at Monterey. Officers who successfully complete their studies graduate with a BS or BA degree.





BIG DAY—Following graduation ceremonies the new officers perform the Academy's traditional hat toss.

(Continued from page 31)

The affair is a solemn and impressive ceremony conducted in Tecumseh Court in the center of Bancroft Hall. It is then you will embrace the midshipman's motto—Not Self, But Country—and make it a part of your character for the rest of your life.

With your name an official part of the Naval Academy, you now have the privilege of displaying it on all of your clothes—right across the front of your white jumper. As a Plebe you are also privileged to learn considerably more than is normally expected of a college freshman. Some of your privileges are: walk *only* down the center of the corridors; turn square corners, keeping your head up high and shoulders back; stand braced with fingers extended along the seams of your trousers.

Rules, regulations, dos and don'ts are hammered into your head far more than you may have ever expected while aboard ship. All this soul-building indoctrination begins the day you arrive and continues to mount throughout Plebe Year. One thing that will probably come easier to you at first is sounding off—your rank, name and class—always ending with, "Sir." You already know the importance of that three-letter word.

LIKE REAL—Midshipmen learn tactics with CIC evaluator.



However, it's never too late to dust off any cobwebs that may have grown over your memory bank. You will be expected to do a good deal of memorization.

Plebe Summer will help to lay a solid foundation for the commencement of your Fourth Class year. What you learn as a Plebe will remain with you throughout your years as a Youngster (Third Classman), a Second Classman (Junior), and a First Classman (Senior).

Academy Curriculum

The basic four-year curriculum at the Academy consists of 137 semester hours which means each academic year is tough. Normally, you will be required to carry a composite of subjects amounting to about 17 semester hours. These subjects range from mathematics, gunnery, language, English, history and government to geography, natural philosophy, chemistry and engineering. They are offered each fall and spring terms through the Academy's seven academic departments: Engineering; English, History and Government; Foreign Languages; Mathematics; Naval Sciences; Science; and Weapons.

Every day except Saturday and Sunday is divided into six 50-minute periods for academic study. There are only four periods scheduled on Saturdays. Monday through Friday two-and-a-half-hour study periods are set aside in the evenings, at which time no other activities are scheduled.

As it works out, you will be provided two hours of study for every hour spent in the classroom. This affords you ample time to find answers to your questions in the Academy's 165,000-volume library. And since each class consists of usually no more than 15 midshipmen, there will be plenty of opportunity for you to receive personalized instruction.

Fifteen per cent of your curriculum will deal with scientific, electrical and engineering courses, 25 per cent with social and humanistic studies, and 20 per cent with military and professional subjects. The remaining 15 per cent is devoted to electives, over 200 of which are offered.

IN THE FIRST swing of your Fourth Class studies in the Naval Science Department, you will probably feel right at home, since it is here most midshipmen get an immediate taste of naval life by learning basic seamanship and naval orientation.

You will handle power and sail boats of nearly every description, learn the Rules of the Road, study the elements of navigation, and practice signaling with flashing light and signal flags.

It will become second nature for you to feel a cool breeze cross the bow of a knockabout slicing the sea-like waters of Chesapeake Bay. Midshipmen eagerly look forward to the 12 hours' training they will receive in the 26-foot, single-masted knockabouts, and the eight hours' experience to be gained as a crewman in one of the Academy's 44-foot *Luders* yawls.

Your advanced training will be given as a Second and First Classman in 30-foot *Shield* sloops and *Skip-jacks*, as well as the 50-foot yawls *Annie D* and *Gypsy*, the 71-foot yawl *Royono*, and the 88-foot schooner *Freedom*.

Learning to maneuver a 50-foot power craft will be part of your seamanship training which also includes tying knots, bends and hitches with line. After you've attended about three of these lessons, you will be ex-

pected to tie 20 knots within a certain number of seconds.

AS A SECOND and First Classman you will receive most of your practical seamanship by learning to skipper an 80-foot Yard Patrol (YP) boat. You may also look forward to learning CIC procedures and shipboard communications.

In the Engineering Department you will be introduced to basic engineering concepts which may lead to a more thorough study in the fields of aerospace and mechanical and naval engineering. Unfamiliar with engineering statics and dynamics, mechanics of materials, ship hydrostatics (or buoyancy and stability), thermodynamics and fluid mechanics? You won't be after a few lectures and lab sessions as a midshipman.

Your first association with the English, History and Government Department will be during Plebe Summer when you become familiar with the Academy's library and how to use its facilities. Commencing with your Fourth Class sessions with the department, you will develop a mature ability to read with comprehension and appreciation, write with clarity and style, and speak with conviction and poise.

Since you may eventually touch the four corners of the world as a naval officer, the Foreign Languages Department offers a wide range of courses, including French, German, Italian, Portuguese, Russian and Spanish. Your aim will be to develop a working knowledge of one of these languages with the emphasis on conversation. More than one language may be mastered.

HAVE YOU studied trigonometry? If not, then as part of your summer indoctrination you will be introduced to plane trigonometric equations. Otherwise, your Mathematics Department classes will not commence until the fall semester. Calculus, differential equations and vector mechanics are the starters. In addition, the math department offers 24 elective courses.

When classes commence in the Science Department in the fall, you will begin studies in chemistry, chemical theory, atomic structure and the study of metals. A much broader field is open to upperclassmen.

Mental health and physical science, as they pertain to everyday life under various military environments, will be studied during Plebe Summer and the first semester of your First Class year.

Athletics, however, is a full four-year program. If you are an athletic buff, you couldn't have picked a better spot. During your summer session the Physical Education Department just about lets you run the gamut of Academy sports. Intramural and intercollegiate sports of every nature are offered year-round. During the football season, selected units of the Brigade travel to away games, but the entire Brigade attends the home games, and the annual rival clash with Army in Philadelphia.

The first task of the Executive Department is to introduce you to your new way of life at the Academy and to counsel you on its mission, ideals, standards, traditions and customs. Drills and watchstanding will become routine practice beginning with the first semester of your Fourth Class year and continue until graduation day.

The primary function of the Executive Department is to prepare you for exercise of command. In other words, it is designed to develop your character and your proper military and personal habits. You will learn that leadership is both an art and a science as you are given the basic knowledge, guidance, motivation and experience to become an effective leader.

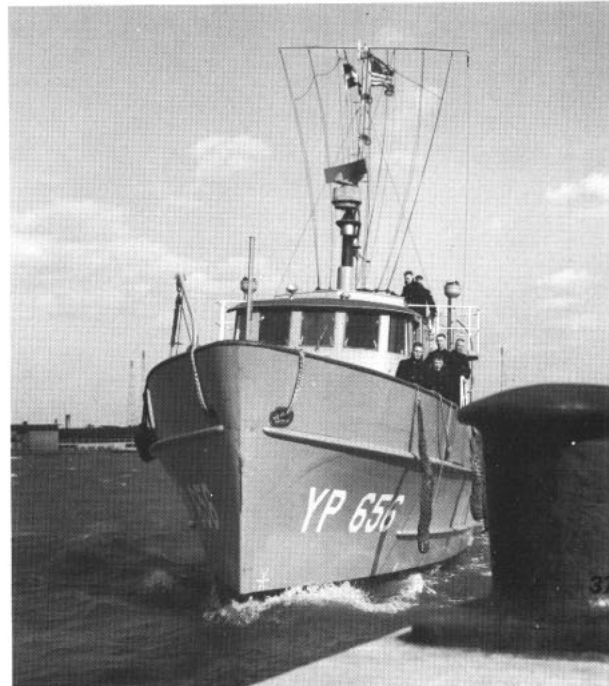
Your professional training program, set aside from the academic schedule, will provide you with over 2000 hours of instruction during your four years at the Academy. It will encompass a variety of subjects, fundamental to every midshipman's basic makeup in becoming a professional naval officer.

ALTHOUGH academic credit is not given through the program, your performance within the Executive Department will be reflected in your final class standing.

Discipline will be a major factor in your development as a naval officer. And your appreciation of discipline is achieved through proper motivation applied to personal example and leadership.

The Academy's discipline yardstick is measured by

ACADEMY'S 'FLEET'—Sailing fleet and YP squadron help teach midshipmen skills and knowledge of seamanship.





AT SEA—Academy midshipmen are briefed aboard USS Guam (LPH 9) during summer training with PhibLant.

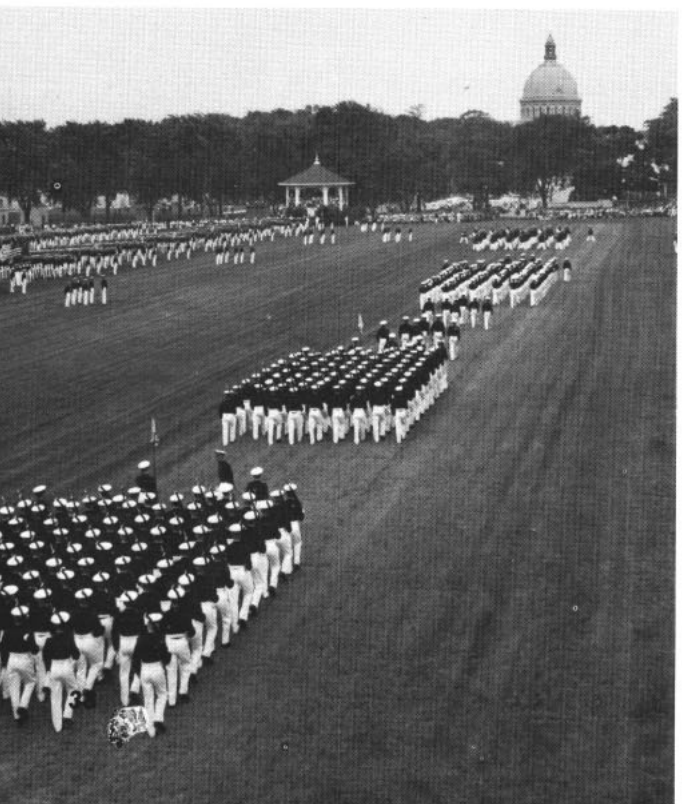
demerits awarded midshipmen for infractions ranging from minor to serious breaches of trust and honor. The latter rarely occur. But watch out for those minor offenses. They are common—a button missing, late for muster, even inattention in class.

Unless you become a rare exception, plan on receiving around 54 demerits during your four-year stay in Annapolis. That's the average number each midshipman is awarded. Limits are established whereby Fourth Classmen are allowed 300 demerits, Third Classmen, 250, Second Classmen, 200, First Classmen 150. Any of the 500 instructors, professors and military advisors or even other midshipmen may note infractions for which demerits are awarded.

Being awarded too many demerits could affect the amount of personal freedom and privileges you are afforded. As a Fourth Classman, you'll soon learn to cherish every privileged hour.

PRIVILEGES and personal freedom vary with the degree of a midshipman's authority and responsibility.

FORWARD—Midshipmen pass in review on Worden Field.



There are, however, several regular periods of leave which all midshipmen are granted. These include Christmas leave of about two weeks, a three-day weekend break at the end of the first term in January, a three-day spring leave usually in late March, and the month-long summer leave for the three upper classes.

Annapolis does not become a gray-walled prison once you enter the gate. Midshipmen are granted liberty in the city of Annapolis, based on their seniority and responsibility. For example, you, as a Fourth Classman, may be granted liberty on Saturday afternoons and will be authorized dining-out privileges with relatives and close friends both on Saturdays and Sundays.

In addition, you may look forward to escorting young ladies (known to midshipmen as "drags") on occasions through the year and during June Week.

As a Third, Second and First Classman, you may have liberty on Saturday afternoons and evenings, and on Sunday afternoons. In addition, Second Classmen rate liberty on Wednesday afternoons while First Classmen rate liberty every afternoon plus Friday evenings. Weekday liberty begins after classes are completed for the day.

EACH Sunday begins with all midshipmen attending Divine Worship Services of their denomination. Midshipmen of the Roman Catholic faith attend Mass at 0800 in the Academy Chapel which has a seating capacity of 2500. The Protestant worship service is interdenominational and is conducted at 1030. Midshipmen of the various Protestant denominations may attend the chapel service or the church of their choice in the city of Annapolis. Midshipmen of the Jewish and Greek Orthodox faiths attend synagogue or church in Annapolis.

A half-hour before the 1030 service, the Naval Academy Band gives a concert in front of the chapel. Meanwhile, the Brigade of Midshipmen march to the chapel where they are greeted and reviewed by the Superintendent and his official party.

During the Protestant service the chapel choir numbers about 300 voices, while 150 midshipmen make up the choir at Sunday Catholic Mass.

Religion, therefore, is an important part of the midshipman's life.

Reflecting once more on the academic program, you might discover doing your utmost in each of the seven departments during the first three years at Annapolis will pay off well as a First Classman. Each year a small group of First Classmen are selected on the basis of their academic standing to become Trident Scholars. These men are excused from all regular curriculum studies and allowed to work independently under faculty supervision. In 21 years of competition, 19 Academy graduates have been selected to attend Oxford University as Rhodes Scholars.

After you receive your bachelor of science degree and your commission, your study need not end. Future professional development of your education can be pursued in such schools as the U. S. Naval Postgraduate School, the Naval War College, the Armed Forces Staff College, the National War College or any number of civilian institutions sponsored by the military services.

So there you have it.

From now on, opportunity should prove a byword of your naval career. —Marc Whetstone, JOC, USN.

Your Status as Navyman Can Make It Easier for Your Son To Win USNA Appointment

When your schoolboy son plans his future, he may observe your naval career and decide that it's a sailor's life for him. If he has his eye on a career as a commissioned officer, he should certainly consider an appointment to the U. S. Naval Academy as the first step toward a commission in the sea service.

The fact that you are a career Navyman opens paths to a Naval Academy appointment for your son which are closed to other young men. Your son may, for example, be eligible to compete for one of the 100 annual appointments to the Naval Academy made by the President of the United States from among the sons of career servicemen.

If your son is appointed to the Naval Academy, he will be paid \$151.95 per month and his tuition, room and board will be furnished.

When he graduates, he will receive a Bachelor of Science Degree and a commission in the Regular Navy or the Regular Marine Corps.

To compete for a Presidential appointment to the Academy, your son should send a letter of application to the Chief of Naval Personnel (Pers-B66), Department of the Navy, Washington, D. C. 20370, in which he includes the following information:

- His permanent and temporary address.
- His date of birth.
- The date of his high school graduation.
- Whether or not he has made a previous application and, if so, when.
- Your name, rank or rate, serial number, component and branch of service.
- If you are on active duty, a statement of your service prepared by your personnel officer, who must certify that you have been on active duty for at least eight years and show your date of enlistment or commission, component and branch of service.
- If the applicant's parent is retired or deceased, a copy of his retirement orders or casualty report, as applicable, should be attached.

Your son can also request a nomination from the Vice President who may have a maximum of five appointees attending the Academy at one time.

Each senator and representative of the 50 states, the Resident Commissioner of Puerto Rico and the Commissioners of the District of Columbia may also have five midshipmen attending the Academy, thereby opening up several other possibilities for your son.

The Governors of Puerto Rico, the Canal Zone, the Virgin Islands, Guam and Samoa may, collectively, have one midshipman attending the Naval Academy.

If your son has already enlisted in the Navy or the Marine Corps, Regular or Reserve, he may be eligible to receive a Secretary of the Navy nomination for the Naval Academy. Each year, 85 appointments may be made from members of the Regular Navy and Marine Corps. An additional 85 appointments are available to members of the Naval and Marine Corps Reserve.

To be eligible to compete for one of these appointments, an applicant must be enlisted before 1 July



of the year preceding admission to the Academy and must meet the general eligibility requirements given in the Naval Academy catalog.

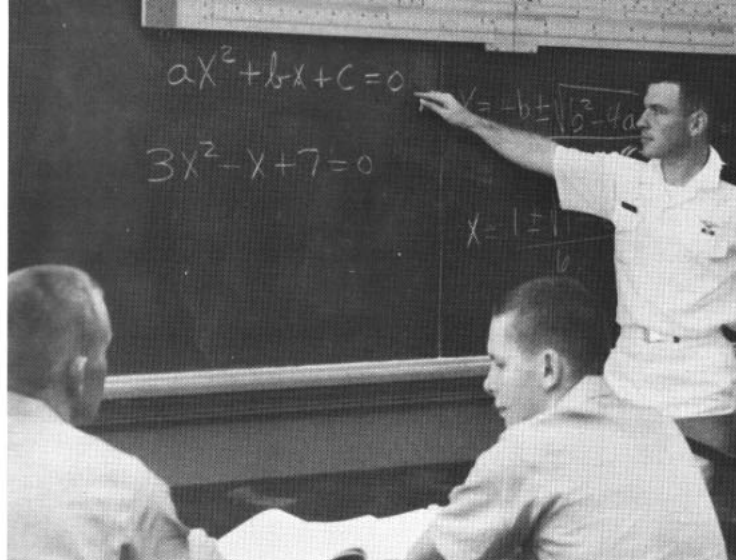
As a matter of record, appointments to the Naval Academy are also given to the sons of deceased or disabled veterans, to honor graduates of naval and military schools, to members of the Naval Reserve Officers' Training Corps and to the sons of Medal of Honor recipients. Except for the sons of Medal of Honor recipients, these appointments are all awarded on a competitive basis.

If your son is interested in obtaining an appointment to the Naval Academy, he should not limit his efforts to obtaining a Presidential or a Vice Presidential nomination. He may take advantage of every source of appointment available to him.

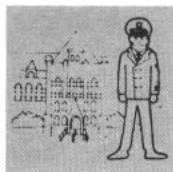
If you are on active duty; have had eight years of service and your prospective college student is academically and physically qualified, he is eligible to compete for one of the appointments awarded to servicemen's sons. Whether you are an officer or an enlisted man is immaterial.

If your son is interested in becoming a midshipman at the U. S. Naval Academy, whether or not he intends to apply for a Presidential nomination, he would do well to obtain a copy of the 1967-68 *Naval Academy Catalog* and check the academic and physical entrance requirements and other pertinent information. Items of immediate interest to a prospective appointee include a sample of the letter requesting nomination.

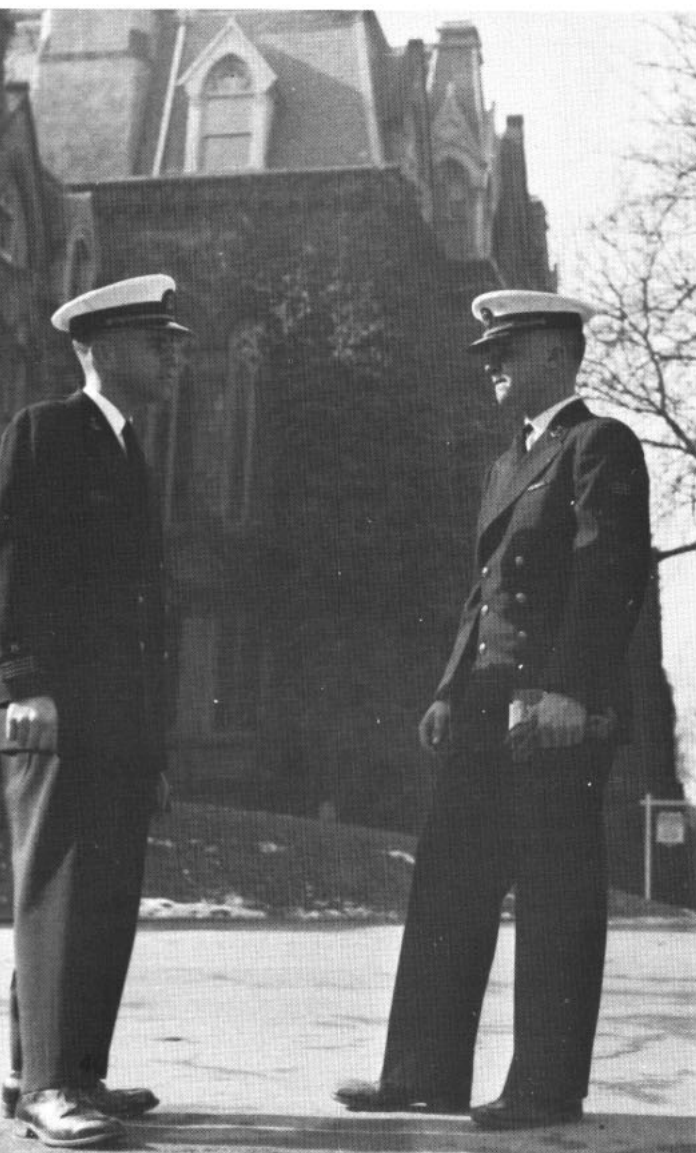
A copy of the current catalog can be obtained by writing to the Chief of Naval Personnel (Pers-B66), Department of the Navy, Washington, D. C. 20370.



IT'S ACADEMIC—NROTC units at civil colleges stress academic achievement, but also maintain high standards of military training. NROTC students are taught a wide variety of military subjects by qualified naval officers.



NROTC: College and a



THE INSTRUCTOR in front of the classroom is wearing the Silver Star. Fresh from action in Vietnam, he suddenly finds himself teaching college students in Illinois.

But he's still on duty with the Navy, and this duty is as significant as the assignment he has just completed. How can that be?

Simple. He is stationed at an NROTC unit.

The Navy requires some 12,000 new officers annually. Of this number, the NROTC program supplies 17 per cent, making it one of the largest single sources of Regular Navy officers on active duty.

The mission of this program, begun in 1926, is "to provide by a permanent system of training and instruction in essential naval subjects at civil education institutions a source from which qualified officers may be obtained for the Navy and Marine Corps, and the Naval Reserve and the Marine Reserve.

NROTC's 53 units at college and university campuses throughout the nation are divided into two groups: Regulars, who are subsidized by the Navy, participate in three summer periods of at-sea training and serve a minimum of four years in the Regular Navy or Marine Corps; and Contracts, who are not subsidized by the Navy, participate in one summer period of at-sea training, and serve three years as Reserve officers.

Let's take a look at one of these NROTC colleges, say in the Midwest. Despite the fact that the midwestern states are far from either coast, they have always been a prime source of capable seaman. In Illinois, for example, you'll find three NROTC colleges, including the University of Illinois.

AT THE University of Illinois Captain Joseph Spitler, USN, heads the NROTC. His staff includes nine other Navy people, officer and enlisted, and two Marines.

ALL HANDS



MILITARY TRAINING of NROTC midshipmen is designed to complement the academic training of the future officer.

Commission

The students with whom they work have competed in a rigorous national selection process to become Regulars, or have been selected by the Commanding Officer, NROTC Unit, to become Contracts. In essence, however, all are the same—green freshmen at a large university.

A new class will number from 100 to 120 in a battalion of about 250—relatively few in a university of 27,000. Some of these will drop out the first few weeks, and only those who reach graduation are commissioned. No one is commissioned without having achieved at least the baccalaureate degree.

For this reason, CAPT Spitler based his welcome aboard address last fall, as most Professors of Naval Science do, on the importance of education and study to the midshipman. "Military training is important," he said, "but first emphasis at this university must be placed on your general education."

The freshman, or fourth class midshipman, will enter any of a number of colleges which are part of the University of Illinois, including engineering, business, liberal arts, or even journalism. There is an opportunity also to enroll in computer courses, in keeping with recent changes in the modern Navy. He must accumulate at least 130 credit hours before he leaves—and this includes 24 credit hours of Naval Science and related subjects.

HERE IS A TYPICAL example of an NROTC student in training.

The first year he takes Naval Orientation and a history of naval warfare, along with his regular academic courses. As a third classman he takes Naval Weapons in the sophomore year.

As a second classman, or junior, he learns Naval Operations and Navigation; or the History of Land Warfare with the Marine officer instructors—if he elects to go Marine option. His last year he studies



APPLIED KNOWLEDGE—Skills and knowledge obtained in classroom are applied during NROTC training classes.

From Active Duty to NROTC

The NROTC program is available primarily to high school seniors or recent high school graduates. Active duty enlisted men, Regular or Reserve, may also apply. (However, those on active duty must compete in the same manner as civilian applicants, and must be available for NROTC medical examinations and interviews usually held early each year.)

Specifically, the NROTC applicant must be:

- A male citizen of the United States.
- At least 17, but less than 21 years of age as of 30 June of the year he would enter college.
- Unmarried, and must never have been married.
- Physically qualified.
- A high school senior, or high school graduate.

The Navy College Aptitude Test (NCAT) is always administered on the second Saturday in December of each year. Applications must be received by the Naval Examining Section of the Educational Testing Service, Princeton, N. J., by 17 November, and examination centers are established at certain naval shore activities both overseas and stateside.

Those who qualify on the NCAT are scheduled for medical examinations and interviews held during January and February. Final selections are then made by selection committees convened in each state and territory during March; those selected begin college in September.

Additional details are issued annually by the Chief of Naval Personnel and may be obtained from Navy Recruiting Stations and local high schools.



LEARNING PROCEDURES used aboard Navy ships are primary in military training of NROTC midshipmen.

Naval Engineering and Leadership, or Amphibious Operations in the case of the Marine candidate.

The men who teach these courses are all qualified officers and their assistants are experienced petty officers. Instructors usually stay about three years, after being selected in an unusual manner. The Bureau of Naval Personnel determines what type of instructors the unit needs. BuPers then selects persons to fit the requirement and forwards their names and qualifications to both the university and the commanding officer of the detachment.

Orders are not completed until both the university and the commanding officer have approved the candi-

dates. Successful candidates are appointed "assistant professor" by the University.

THERE IS MORE to training officers than mere classroom work, however. The students get real experience in the Attack Teacher, on the 5-inch mount in the armory, and with remote-controlled ships.

Further training comes on the drill floor.

Drill, according to the Marine sergeant who assists in this training, is one of the basics through which future officers learn discipline in following commands and reacting to orders. He and a Marine major are the primary advisers for all drill activities in the battalion.

At Illinois the 250 midshipmen are distributed through three regular drill companies and an exhibition drill team. The job of teaching drill to so many men is simplified because the bulk of training is conducted by the upperclass midshipmen themselves.

Added interest in drill stems from company competition for the battalion colors. Midshipmen officers spur their men to proficiency with even greater vigor because of awards given to the best platoon leader and company commander of the year. The exhibition unit has been very successful, winning major competitions in the Midwest.

Another aspect of NROTC's mission is keeping the students in good physical condition. This is done with standard physical fitness tests and a swimming proficiency program.

NROTC is a great two-pronged offer—for both an education leading toward a college degree and a commission. Interested? See box on the preceding page.

One of the instructors at University of Illinois summed it up. "I consider this an important assignment—I welcome the opportunity to participate in the building of good Navy and Marine Corps officers."

—Michael B. McClellan, Midshipman, USNR



FOR NAVAL OFFICERS: Correspondence Courses

THIS IS THE LATEST list available of officer correspondence courses together with their NavPers numbers and number of assignments of each. You will also note that the right-hand column shows which designators are recommended for the course listed.

Courses are available from the U. S. Naval Correspondence Course Center, the Naval Medical School, the Naval Dental School, the Naval War College, the Selective Service System, the Defense Intelligence School, the Submarine School, Naval Security Group and the Industrial College of the Armed Forces.

In these listings, the abbreviation "CONF" or "RD"

indicates Confidential or Restricted Data involved.

This list is current as of the date this issue of ALL HANDS went to press. However, courses may change from time to time.

An up-to-date list of courses administered by the Naval Correspondence Course Center is published each month by the Center, and changes in those and other courses are usually announced in ALL HANDS.

Correspondence courses are not obligatory for officers on active duty; however, their completion is made a matter of record for the use of selection boards and others concerned.

Recommended Designator Groups

Group I				Group II		Group III		Group IV		Others	
11xx	723x	743x	762x	140x		310x	190x	230x		161x	167x
13xx	724x	745x	764x	145x		510x	191x	290x		162x	194x
711x	733x	754x	766x	151x		798x	192x	817x		163x	410x
713x	734x	760x	774x	153x		849x	210x	818x		164x	785x
714x	741x	761x	782x				220x			165x	821x
721x										166x	831x

Courses Available from the U. S. Naval Correspondence Course Center

An asterisk in the column under assignments indicates the course is currently under development, and not yet available.

Applications for these courses should be submitted on Form NavPers 1550/4 (Formerly NavPers 992) (Rev. 10/54 or later) and forwarded via official channels to the Naval Correspondence Course Center, Scotia, N. Y. 12302.

NavPers Numbers	Course Title	Assignments	Applicable Designator				
10403-A	The Communication Officer (CONF-MH) (Credit granted for 10403-A or 10416-A, but not for both)	14	ALL	10426	Quality/Reliability Assurance for Shipyard Application	11	Group II
10404	Introduction to Space Technology	5	ALL	10427	Organizational Planning for Naval Commands.	7	ALL
10405-A	Antisubmarine Officer (CONF-MH)	10	Group I, 163x, 733x, Group II	10428	Mine Warfare (CONF)	8	Group I, 145x, 163x, 733x, Group II
10406-B	ASW Operations (CONF)	5	Group I, 163x, 733x	10429	Principles of Navy Diving	12	ALL
10409-A	Navy Missile Systems (CONF)	9	Groups I, II, 163x	10439	Fluid Power	6	ALL
10411	Nuclear Ordnance (CONF, RD)	5	Groups I, II	10440	Disaster Control	11	ALL
10412-2	Supply Duties for General Line Officers	5	Group I	10441	Digital Computer Basics	16	ALL
10413-2	Naval Control of Shipping	4	Group I, 163x	10444	Introduction to Naval Electronics	5	ALL
10414-1	The Operations Officer (CONF)	7	Group I	10445	Naval Electronics, Part I	15	ALL
10415	The Registered Publications Custodian (CONF)	2	ALL	10446	Naval Electronics, Part II (CONF)	10	Groups I, II, 161x
10416-A	Naval Communications (Credit granted for 10416-A or 10403-A, but not for both)	12	ALL	10447	Naval Electronics, Part III (CONF)	7	Groups I, II, 161x
10417-1	General Oceanography	5	ALL	10448	Mathematics, Part I	11	ALL
10418	Oceanography in ASW (CONF)	5	Group I, 163x, 733x, Group II	10450	Mathematics, Part III	14	ALL
10423	History of the Chaplain Corps, Part III	10	410x, 194x	10507	Principles of Naval Engineering, Part I	*	Groups I, II
10424	Disbursing, Part II	4	310x, 798x	10508	Principles of Naval Engineering, Part II	*	Groups I, II
10425-1	The Economics of Defense	6	ALL	10512	Amphibious Operations	*	Groups I, III, 163x, 410x, 733x
				10513	Operations and Systems Analysis	*	ALL
				10515	Naval Operations	*	ALL
				10717-B1	International Law	15	ALL
				10719-4	The Watch Officer	4	Group I
				10720-6	Navy Public Information	6	ALL
				10721-B	Navy Organization for National Security	*	ALL
				10722-A	Weapons Officer	5	Group I
				10723	Office of the Judge Advocate General	2	162x

10725-1	Navy Admiralty Law Practice	2	162x
10726-4	Investigations	4	162x, 163x, 165x
10727-A	Claims	4	162x, 163x, 165x
10728-A	Fundamentals of Naval Intelligence (CONF-MH)	14	ALL
10732-A (Interim)	Financial Management in the Navy	5	ALL
10733-4	Industrial Relations	11	ALL
10737-3	Practical Problems in Marine Navigation	4	Group I
10738-5	Shiphhandling	11	Group I
10740-A4	Navy Regulations	11	ALL
10741-A	Public Works Department Management	7	510x, 849x
10742-A	Contract Administration and Contractor-Labor Relations	*	162x, 510x, 849x
10745-A	Naval Construction Forces	*	510x, 849x
10748-A	Design Criteria for Mechanical Engineering Systems	9	510x, 849x
10749-3	Basic Structural Engineering	3	510x, 849x
10749-A	Design Criteria for Structural Engineering	*	510x, 849x
10751-A	Airfield Pavements	3	510x, 849x
10755-1	Aviation Operations (CONF)	9	Group I
10756-2	Naval Aviation	7	ALL
10757-1	Aircraft Electrical Systems	5	Group I, 151x
10760-B	Operational Communications (CONF)	7	Group I, 161x
10761-4	Operational Tactics (CONF)	10	Group I, 163x
10762-B	Shipboard Electronic Equipments	5	Groups I, II
10771-B	Radiological Defense	12	ALL
10900-A	Naval Orientation	16	ALL
10901-B1	Nuclear Physics	8	ALL
10902-B	Logistics	9	ALL
10903-A1	Leadership	8	ALL
10904-A	Navy Petroleum Supply	8	Group III, Group II
10905-A1	The Navy Chaplain	9	410x, 194x
10906-3	History of the Chaplain Corps, Part I	8	410x, 194x
10907	History of the Chaplain Corps, Part II	6	410x, 194x
10910-A	Cold Weather Engineering	5	510x, 849x
10921-4	Marine Navigation, Course I	6	Group I
10922-B	Principles of Naval Ordnance and Gunnery	8	Groups I, II
10923-A4	Seamanship	9	ALL
10924-B	Principles of Guided Missiles	10	Groups I, II, 163x
10926-B	Electronics Administration and Supply	6	Group I, 161x, 310x, 798x, Group II
10933-3	The Maneuvering Board	6	Group I, 163x
10934-4	Elements of Naval Machinery	15	Groups I, II
10935-A4	Engineering, Operation and Maintenance	10	Groups I, II
10936-5	Practical Damage Control	7	Groups I, II
10937	Theoretical Damage Control	6	Groups I, II
10938-5	Diesel Engines	6	Groups I, II
10939-B	Engineering Duty Officer (General)	7	140x
10945-3	Marine Navigation, Course II	9	Group I
10946-A	Naval Arctic Operations	6	ALL
10947-A	Industrial Management	11	Groups II, III, 166x
10952-A2	The Combat Information Center Officer (CONF)	16	Group I, 163x, Group II
10953-A	Refresher Course for Meteorologists	12	135x, 153x, 821x
10954-B1	Meteorology	7	Group I, 153x, 167x, 821x

10959-A	Air Navigation, Part I	6	13xx
10960-A	Air Navigation, Part II	6	13xx
10961-A4	Airplane Power Plants	10	13xx, 151x, 741x, 761x
10964-A	Naval Airborne Ordnance	10	Group II, 13xx
10965-8	Education and Training	11	ALL
10968-B	Personnel Administration	12	ALL
10969-A3	Special Services	4	Group I, 166x, 410x
10971-3	Uniform Code of Military Justice	2	ALL
10972-B	Military Sea Transportation Service	6	ALL
10975-B	Security of Classified Information	6	ALL
10976-A	Disbursing, Part I	5	310x, 798x
10977-6	Navy Travel	4	310x, 798x
10978-A5	The Navy Supply System	3	310x, 798x
10980-B4	Supply Afloat	10	310x, 798x
10983-A7	Supply Ashore	14	310x, 798x
10984-A	Appropriation and Cost Accounting	8	310x, 798x
10985-B2	Jet Aircraft Engines	7	13xx, 151x, 741x, 761x
10986-1	Ship Activation	6	ALL
10988-A2	Navy Contract Law	8	Group II, 162x, 310x, 510x, 798x, 849x
10991-A1	Shipboard Electrical Systems	8	Group I, 140x
10992-A	Engineering Administration	8	Groups I, II
10993-5	Military Justice in the Navy	16	ALL

Correspondence Courses of the Naval Medical School

Applications for these courses should be made on Form NavPers 1550/4 (formerly NavPers 992), with appropriate change in the "To" line, and forwarded via official channels to the Commanding Officer, U.S. Naval Medical School, National Naval Medical Center, Bethesda, Md. 20014 (Attn: Correspondence Training Division).

10501	Hematology	2	Group IV
10502	Serology	3	Group IV
10503	Biochemistry	3	Group IV
10504	Bacteriology and Mycology	3	Group IV
10505	Pathologic Anatomy Technique	2	Group IV
10506	Urinalysis, Gastrointestinal Contents, and Endocrinology	2	Group IV
10509	Manual of the Medical Department, Part III	6	Group IV
10514	Decedent Affairs	2	Group IV
10702-A	Fundamentals of X-ray Physics and Technique	8	Group IV
10703-A	Naval Preventive Medicine	*	Group IV
10705-A	Insect and Rodent Control	2	Group IV
10706-A1	Combat and Field Medicine Practice	5	Group IV
10708-A1	Manual of the Medical Department, Part I	4	Group IV
10709-A1	Manual of the Medical Department, Part II	5	Group IV
10734-1	Hospital Personnel Administration	5	Group IV
10735	Physical Medicine in General Practice	7	Group IV



10765	Treatment of Chemical Warfare Casualties	3	Group IV
10766	Legal Medicine	8	Group IV
10767	Hospital Food Service Management	6	Group IV
10769	Medical Service in Joint Overseas Operations	2	Group IV
10772-A1	Control of Communicable Disease in Man	7	Group IV
10773	Radioisotopes in Medicine	7	Group IV
10912-A	Aviation Medicine Practice	6	Group IV
10943-A1	Medical Department Orientation	3	Group IV
10995-A	Tropical Medicine in the Field	12	Group IV
10997-A	Low Temperature Sanitation and Cold Weather Medicine	3	Group IV
10999-A1	Pharmacy and Toxicology	3	Group IV

Correspondence Courses of the Naval Dental School

Requests for enrollment (use NavPers Form 1550/4, formerly NavPers 992) should be addressed to the Commanding Officer (Code E-43), U.S. Naval Dental School, National Naval Medical Center, Bethesda, Md. 20014, with appropriate change to the "To" line.

10407-A	Endodontics	4	Group IV
10410	Fixed Prosthesis	7	Group IV
10419	Health of Supporting Tissues in Complete Denture Construction	2	Group IV
10420	Advanced Speeds in Operative Dentistry	3	Group IV
10421	Diagnosis of Lesions of the Oral Mucous Membrane	5	Group IV
10511	Removable Partial Dentures: Planning and Design	1	Group IV
10517	Special Oral Surgical Procedures and Fractures	*	Group IV
10729-A	General Oral Surgical Procedures and Exodontia	*	Group IV
10736-B	Dental Administration	11	Group IV
10739-1	Oral Diagnosis	10	Group IV
10758-1	Periodontics	9	Group IV
10763-1	Complete Dentures	6	Group IV
10764-A	Removable Partial Dentures	9	Group IV

Correspondence Courses of the Naval War College

These extension courses are conducted by the Naval War College, Newport, R.I. Requests for enrollment should be made in letter form, addressed to the President, Naval War College, Newport, R.I. 02844.

NWC 14	National and International Security Organization	2	ALL
NWC 15	Command Logistics	3	ALL
NWC 16	International Law	6	ALL
NWC 17	International Relations	6	ALL
NWC 18	Military Planning	2	ALL
NWC 19	Naval Operations	2	ALL
NWC 20	Strategic Planning	2	ALL
NWC 21	Counterinsurgency	4	ALL

Correspondence Course of the Defense Intelligence School

Requests for enrollment in this course should be addressed to: Commandant, Defense Intelligence School, Non-Resident Course Division, U.S. Naval Station, Washington, D.C. 20390.

DIS	Intelligence (4 units) (CONF-MH)	12	ALL
-----	-------------------------------------	----	-----

Correspondence Courses of the Naval Submarine School

These courses are administered by the U.S. Naval Submarine School. They are available and creditable only to those who are members of, or associated with, Reserve Submarine Divisions, or who are attached to Battalions or Brigades having Submarine Divisions under their administrative command. Requests for enrollment should be forwarded by official letter to the Officer in Charge, U.S. Naval Submarine School, New London, Conn. 06342.

Number	Course Title	Assignments	Applicable Designators
None	Basic Submarine Course	12	ALL, subject to note above
None	Advanced Submarine Course (CONF)	12	ALL, subject to note above

Correspondence Courses of the Naval Security Group

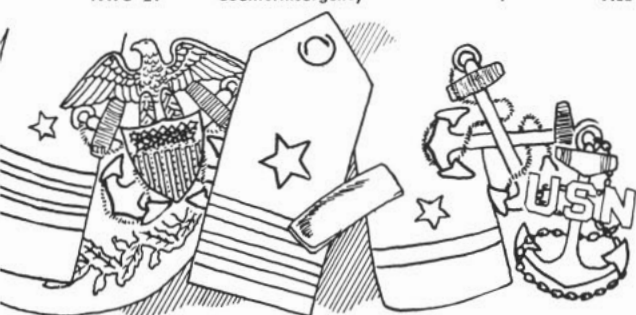
These courses are available and creditable only to those who are members of, or associated with, Naval Security Group Reserve units. Requests for enrollment should be made by official letter addressed to the Director, Naval Security Group, 3801 Nebraska Avenue, NW., Washington, D.C. 20390 and forwarded by official channels.

SECGRP 1	Special Communications 1 (CONF-MH)	5	ALL, subject to note above
SECGRP 2	Special Communications 2 (CONF-MH)	5	ALL, subject to note above
SECGRP 3	Special Communications 3 (CONF-MH)	5	ALL, subject to note above
SECGRP 4	Special Communications 4 (CONF-MH)	5	ALL, subject to note above
SECGRP 21	Special Communications 21 (CONF)	6	ALL, subject to note above
SECGRP 22	Special Communications 22 (CONF)	6	ALL, subject to note above
SECGRP 41	Special Communications 41 (SECRET)	12	ALL, subject to note above
SECGRP 51	Special Communications 51 (SECRET)	7	ALL, subject to note above

Correspondence Courses of the Industrial College of the Armed Forces

In general, these courses are designed for military officers in the grade of major and above (although exceptions are made for unusually well qualified junior officers) and for certain civilians who might serve in important positions in an emergency. Requests for enrollment should be addressed to: Commandant, Industrial College of the Armed Forces (Attention: Correspondence Course Division), Fort Lesley J. McNair, Washington, D.C. 20315.

ICAF	National Security Management (5 units)	ALL
ICAF	Management in the Department of Defense (2 units)	ALL





OCS: SCHOOL FOR NEW NAVAL OFFICERS

AFTER 16 years and nearly 60,000 graduates, the Officer Candidate School at Newport, R. I., has become an important part of the Navy's educational institution. And it's still growing.

OCS was established during the Korean conflict to help meet the need for large numbers of naval officers. With a comprehensive, 18-week training program, the candidate school helps to prepare college graduates for Navy commissions.

Since its establishment in 1951, the school has for the most part occupied 40 small, temporary buildings constructed during World War II. Now, located in a picturesque area overlooking Narragansett Bay, OCS has a good start on a new campus with accommodations for 2000 students.

OCS students are college graduates from throughout the 50 states. The average officer candidate is 23 years of age. Both men and women attend; with its 100th graduating class last April, the school had commissioned 57,586 officers, including 4185 women.

The prospective officers normally enter OCS immediately after college. The school is also the officer training ground for NESEP students (see article, page 10), who attend OCS after receiving their college educations at Navy expense.

Those who apply for OCS can count on a full, tough

schedule. Only those who are mentally and physically fit and can identify with the Navy will finish the school and receive commissions.

IN SPITE of the high standards set by OCS graduates in the past, students today are setting precedents. The class which graduated last April was the smallest in the history of the school (126 students), and had an outstanding academic record. Its over-all academic average was 3.301, and 29 per cent of its members qualified as honor students. The two figures were the highest in the history of OCS.

Academic incentives include an Honors Recognition program for students who maintain grade point averages above 3.2. There is also an Elective Honors program under which students maintaining averages above 3.2 may attend lectures to stimulate their interest in foreign affairs, current events, and U. S. foreign policy.

The regular academic schedule calls for 565 hours of classroom study with emphasis on naval subjects, particularly leadership. Lesson plans cover naval organization, tactics, engineering, seamanship, weapons, navigation, and other subjects.

The curriculum and training—expanded in recent years—is designed to prepare the students for duty as division and watch officers at sea. Although those who

MOVING UP—OCS students march to class. *Rt:* Campus at Naval Officer Candidate School will look like this.



make it through graduation day are assigned on the basis of individual backgrounds, personal preferences, and the inevitable needs of the service, most go to sea (but on board the types of ships they request). Many qualify for submarine school, underwater demolition training, or nuclear power school. Approximately 10 per cent go on to aviation training and become pilots.

The OCS staff of 178 officers and enlisted men, most of them instructors in technical subjects, makes every effort to bring textbook material to life while following a strict academic and military curriculum. Three-dimensional mockups, working models, cutaway gun mechanisms, and training aids which range from simple block and tackle rigs to full size replicas of ship compartments, help add realism to training.

Eight district yard patrol craft (YPs) based at OCS provide underway experience for the future officers. Students rotate through the duties of Officer of the Deck, helmsman, lee helmsman, navigator and lookout.

ACADEMIC TRAINING is divided into four phases. An Organizational Division introduces the officer candidates to the Navy way of life, and prepares them to enter the Fleet with a fundamental understanding of the Navy's mission, procedures and regulations. The goal is to give each student the administrative knowledge he'll need to serve as a division officer. He becomes familiar with the enlisted rating structure, service records, shipboard organization and regulations, and watches and bills.

The Technological Division gives each candidate a basic knowledge of seamanship, damage control, engineering and navigation. Students visit *uss Buttercup*, a



ENSIGN NOW—OCS student receives diploma. Below: Future officer studies and seamanship is put to the test.



MEALTIME—Food at OCS is served cafeteria style.



full-scale model of seven ship's compartments, two of which can be flooded to simulate battle damage. *Buttercup* is "saved" by OCS students who man pumps and plug holes.

A Tactical Division prepares the candidate for a variety of billets, with emphasis on the duties normally assigned a junior line officer on board ship. After a study of communications, ship phraseology and nomenclature, principles of shiphandling and rules of the nautical road, the student progresses to naval tactics and special operations such as mine warfare, search and rescue, aircraft operations, air defense, amphibious operations and weapons.

THE EIGHT YPs assigned to OCS appropriately make up a YP Division. During the last quarter at school, the student puts his OCS training to the test on board the YPs. The 50-ton, twin-screw patrol craft are considered ideal for OCS training. They approximate a destroyer in handling characteristics, and call for essentially the same maneuvering and underway watch stations found on board a DD.

A typical school day begins with reveille at 0530. Room cleanups are held daily—and so are inspections. Field day is held each Friday night. Liberty is called on Saturday—after drill and inspection.

Meals are served cafeteria style, except for senior students who eat at linen-covered tables and are served in restaurant fashion. It is here the candidates practice dining manners called for in wardroom etiquette.

In order to keep up with many subjects crammed into an 18-week course, students make good use of mandatory study hours between 1900 and 2200 daily. Many are able to muster enough spare time to participate in a variety of extracurricular programs, such as drum and

bugle corps, choir, and athletic competition.

Physical standards at OCS are high. Students are tested monthly on their fitness and must devote certain hours each week to conditioning. The importance of physical fitness is stressed further through competition in a variety of sports. Points won here add to over-all OCS achievement records which determine honor companies at graduation.

THE FUTURE for OCS is bright. At present, the school is in the midst of an extensive building program which, when completed, will make it one of the most advanced and attractive facilities of its kind.

One modern dormitory for 940 students, a three-story, six-wing building named Nimitz Hall, is already in use. A second dormitory nearing completion is a four-story, six-wing building with rooms for 1060 students.

A new technical training building scheduled for completion in 1969 will provide the latest in instructional facilities, including a computerized tactical trainer which will simulate the movements of a destroyer. The new building will also be equipped with closed-circuit television for use as a classroom teaching aid.

A main instruction building is scheduled for completion in 1970, and the following year the finishing touches will be put on a new headquarters building. Two new ceremonial drill fields and a new small craft training facility for the eight YPs will round out the OCS construction program.

When finished in 1973, the OCS complex with its modern look will consist of eight major buildings, as well as the two drill fields, a swimming pool, two gymnasiums and the new small craft facility. OCS will then have acquired the permanent site it deserves.

AT PRESENT Naval Officer Candidate School looks like this. Temporary buildings in foreground will be replaced.





NPGS: POSTGRADUATE SCHOOL

OFFICER POSTGRADUATE education is centered in the Naval Postgraduate School at Monterey, Calif. This school offers one-, two- and three-year technical curricula which include such fields as aeronautics, communications, electronics, environmental sciences, naval engineering (electrical and mechanical), nuclear effects, data processing, operations analysis, systems analysis and weapons systems.

The Postgraduate School also offers a one-year technical engineering science curriculum as both refresher and terminal training in undergraduate mathematics and the physical sciences. The refresher courses last for 24 weeks or less and prepare those who take them for admission to an advanced technical curriculum. Students continuing in engineering science are offered intensive terminal courses in both undergraduate and graduate mathematics, classical and modern physics, chemistry, electronics, probability and statistics, operations research, oceanography and other subjects.

The U. S. Naval Postgraduate School also offers a one-year non-technical naval management curriculum. Officers who have already completed a technical postgraduate curriculum may be ordered to this course.

It provides management training to improve the students' capabilities for organizing, planning, directing, coordinating and controlling activities in which men, money and materials are used to accomplish Navy objectives.

The program permits limited specialization in fields in which the students' sponsoring agency or bureau is interested and also offers elective courses in such areas as economics, financial management, personnel and material management and quantitative analysis.

The offerings of the Naval Postgraduate School are supplemented by instruction given at about 50 cooperating civilian institutions which are well known for their excellence in specific fields of study—both technical and non-technical.

SCHOOLS AND PROGRAMS sponsored by the Department of Defense also supplement the curricula of the postgraduate school and sometimes operate in conjunction with civilian institutions which bestow a degree upon those who successfully complete their course of studies.

Although the postgraduate program is designed to provide, whenever possible, some postgraduate work for all qualified active duty naval officers, an officer's eligibility depends largely upon his academic aptitude, his availability for duty under instruction and the time required to complete his academic work.

Those who meet the criteria for postgraduate education are, for the most part, limited to obtaining an MA or an MS degree. Further education ending in a doctoral degree is limited to exceptionally competent officers chosen to continue in studies which are both compatible with the needs of the Navy and the officers' career pattern and previous education. Candidates for a doctoral degree must also be capable of completing their studies during a four-year shore tour.

An MA or MS degree is a prerequisite for a doctoral study program in the same discipline or one which is directly related to the course of studies followed by the students at lower educational levels.

Welding a group of officers attending the Naval Postgraduate School into a group which can pursue an organized course of studies is one of the factors which is responsible for the nature of the school.

Officers who enroll in the engineering science curriculum, for example, usually come from varied academic backgrounds and may have taken their undergraduate work as long as 15 years ago. Some have had extensive technical undergraduate education while others are deficient in mathematics and chemistry or physics.

The postgraduate school's engineering science curriculum takes these varied undergraduate backgrounds

and, by employing four educational levels tailored to suit the students' previous education, prepares them to pursue a specified course of studies consistent with their previous education.

STUDENTS ENTERING this curriculum are classified under one of the following academic backgrounds for which a definite course of studies is prescribed.

- The high academic background: The postgraduate school offers students in this category two academic quarters of work to prepare them for an advanced technical curriculum. Basically, officers with a high academic background have completed differential and integral calculus and have had at least one year of college physics and chemistry.

- The average academic background: Officers who have at least completed differential calculus or have had a recent survey course in the subject are considered as having an average background as are those who earned average grades in one year of college physics and chemistry. Those who have an average academic background are eligible for participation in a program which offers two academic quarters of work to prepare students for entrance into the advanced technical curriculum.

- The fair academic background (upper) basic program: Officers eligible for this program have never studied calculus and have had less than a year of college physics or chemistry. After completing two academic quarters in this basic program students are adequately prepared for entrance into the General Meteorology curriculum and perhaps for transfer to an advanced technical curriculum.

- The fair academic background (lower) basic program: Most two and three-year study courses at the Naval Postgraduate School require a familiarity with the following basic tool subjects no later than two quarters after enrollment: Mathematics (differential and integral calculus), physics (mechanics, heat, light, sound, electricity and magnetism), chemistry (current theories of atomic structure, chemical bonding, states of matter, chemical kinetics, chemical equilibrium and the compounds of carbon). Officers who haven't completed one year of college physics or chemistry and who are weak in both college algebra and trigonometry are therefore classed as having this background and are recommended for the fair background (lower) basic program. The courses taken depend upon the students' needs.

For example, officers who want a basic technical education probably should take the 36 week terminal science curriculum offered by the Naval Postgraduate School, unless they consider themselves lacking in mathematics and physical sciences.

Officers who consider themselves weak in these subjects are advised to take the refresher course of studies which lasts for 24 weeks or less to determine the extent of their mathematic and science deficiency and to eliminate it.

AS MENTIONED BEFORE, schools and programs sponsored by the Department of Defense supplement the curricula offered by the U. S. Naval Postgraduate School.

These are:

- The Defense Intelligence School: This school



offers a postgraduate curriculum in the basic principles and techniques of intelligence operations. Qualified officers who complete this course of studies may be given an opportunity to increase their value in the intelligence field with language training offered at the Defense Language Institute.

- The Institute of Defense Analyses (IDA): Offers a one-year Defense Systems Analysis program in cooperation with the University of Maryland which confers a master's degree upon those who successfully complete the course of studies.

The Systems Analysis Educational Program trains both military and civilian personnel in the techniques of the planning-programming-financial management system for ultimate assignment to the Joint Staff, the staffs of the Military Department and the Office of the Secretary of Defense in branches that are particularly concerned with systems analysis and force level planning.

The curriculum takes one year to complete and consists of three academic semesters during which the student takes economics, mathematics, statistics, mathematical operations research and strategic studies and analysis of Defense policy discussions.

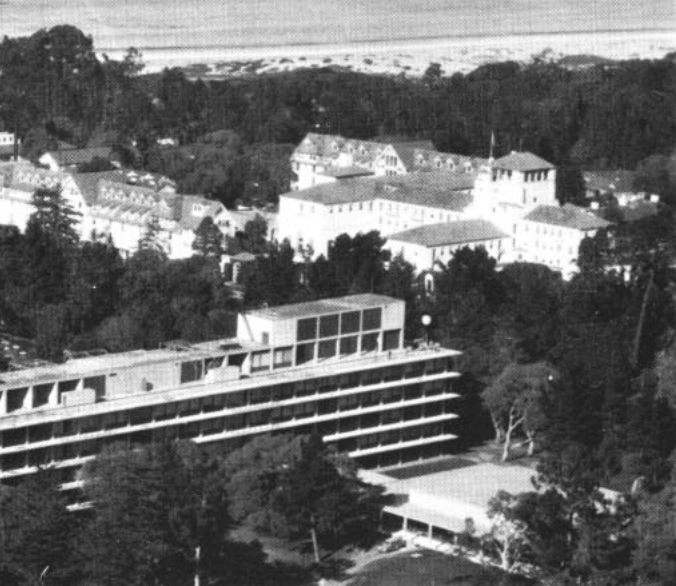
The final phase of this curriculum is devoted to study of politico-military situations, reviews of DOD studies and completion of thesis work.

- The Navy Management Systems Center: This center is located at the Naval Postgraduate School and offers an important DOD course in Defense Management Systems. This four week course provides an appreciation of the concepts, principles and methods of Defense Management as they concern planning, programming, budgeting and their interrelationships with resource management systems.

- The Defense Atomic Support Agency (DASA): This agency sponsors a two-year nuclear engineering (effects) curriculum at the Naval Postgraduate School as a joint service program.

It provides officers with an advanced technical understanding of the phenomenology of the blast and of the thermal, nuclear and biological aspects of nuclear weapons effects, including their employment and defensive situations.

Entrance requirements for the Naval Postgraduate School vary. For example, the academic requirements



for entrance into the postgraduate school itself depend upon the students' previous preparation and the course of postgraduate studies being taken.

The technical postgraduate curriculum conducted at the Naval Postgraduate School, including engineering science, requires a baccalaureate (or its equivalent) and a background in science-engineering fields which provide a foundation for the required technical curriculum.

Students must also have shown an above average grade pattern in differential and integral calculus and physics.

Officers taking a non-technical naval management curriculum must also have a baccalaureate (or its equivalent) including two semesters of college mathematics at or above the college algebra level in which they must have maintained at least a C average. Differential and integral calculus, although not required, are desired.

Requirements vary for officers attending civilian institutions. Generally speaking, they all require a baccalaureate for admission. Officers attending civilian institutions must also meet the requirements of the university or college at which they study.

ENTRANCE REQUIREMENTS FOR DOD-sponsored schools and programs also vary but, generally speaking, they also require a baccalaureate or its equivalent as a universal requirement. IDA and DASA also have the following specific requirements.

The Institute for Defense Analyses (IDA) requires 10 or more years of commissioned service and also mathematics through differential and integral calculus. Students must have academic records indicating mathematical proficiency; be prepared for first-year graduate course in mathematical statistics and have taken one and preferably two three-semester hour courses in economics. Candidates for IDA must be acceptable to the Institute for Defense Analyses and the University of Maryland.

To be accepted for DASA-sponsored programs, officers must have the prerequisites for the previously mentioned DASA-sponsored engineering (effects) curriculum conducted at the Naval Postgraduate School at Monterey.

Doctoral candidates must have a master's degree in

the field in which further education is desired. They must also show an outstanding academic record.

Inasmuch as the Navy tries to provide some postgraduate education for its officers early in their career, they become eligible for postgraduate education upon completing their obligated service or their first sea tour.—whichever is first.

Naval officers who are assigned to postgraduate work obligate themselves at the rate of one year for each six months or fraction thereof of postgraduate education received.

A SELECTION BOARD chooses candidates for postgraduate education within quotas reflecting the Navy's requirements in the fields of study which are available. The board considers the preferences stated by the candidate, his professional performance and academic background records.

Selectees are then classified as principals, alternates and bankees. The latter are principals declared unavailable to attend during the academic year for which they are selected but who may be ordered when available to attend within three years following the fiscal year in which they were selected.

Unrestricted line officers and officers of other categories are eligible for postgraduate education, during 1968 as follows:

- Line officers (110x/13xx/140x/15xx/16xx) in the grades of lieutenant, (lieutenant (jg) for 140x) through lieutenant commander who are available and are professionally and academically qualified are eligible for technical curricula.

- Line officers (110x/13xx/140x/15xx/16xx) in the grades of lieutenant through commander who are available and are professionally and academically qualified are eligible for nontechnical curricula.

- Line officers (110x/140x) from year group 1966 are eligible for the Naval Construction and Engineering curriculum.

- Unrestricted line officers (110x) including Naval Academy graduates, who do not possess designated engineering degrees from year groups 1965 and 1966 are eligible for the Civil Engineering (advanced) curriculum.

Selection for the curriculum leads to change of designator to Civil Engineer Corps (CEC) (5100) and a career in the CEC.

- Supply Corps officers (310x) in the grades of lieutenant through commander are eligible for curricula appropriate to code category 310x officers.

- Chaplain Corps officers (410x) in the grades of lieutenant through commander are eligible for the Religion curriculum. Chaplain Corps officers must have had approximately one year on station as of 1 Aug 1968.

- Civil Engineer Corps officers (510x) in the grades of lieutenant (jg) (in lieutenant zone), lieutenant and lieutenant commander are eligible for curricula appropriate to code category 510x.

- Limited duty officers (6xxx) meeting required academic prerequisites are eligible for technical and nontechnical curricula as may be considered appropriate to their respective 6xxx categories.

- Medical Service Corps officers (230x) should refer to BuMedInst 1520.12 series to determine their eligibility for and method of requesting assignment to postgraduate curricula.



NAVAL WAR COLLEGE has been training future Navy leaders for 83 years. School founded by Admiral S. B. Luce.



THE NAVAL WAR

THE SECRETARY OF THE NAVY had completed his formal speech, followed by a series of informal questions and answers—penetrating inquiries and discerning replies—all off the record.

The next man on the schedule approached the rostrum. He was tall and distinguished, wearing the four stars of a full admiral. There were rumors that he would be a future Chief of Naval Operations, in fact that he was even now being considered for the assignment as CNO.

The audience in Sims Hall, a weather-beaten, ivy-covered building on the historic shores of Narragansett Bay, listened intently. There was a lot of gold braid in that audience, plus the mufti of men of industry, professors and scientists, but the largest part of the group was made up of naval officers wearing two and a half to four stripes.

The occasion: The Global Strategy Discussions.

The place: The Naval War College, in Newport, R. I.

The time: Early summer, 1967.

In a matter of weeks the rumors were to be verified, and Admiral Thomas H. Moorer, USN, would move from his three-hat job as CincLant, CincLantFlt and Saclant to the top-hat job of CNO.

Among his many qualifications for the new job was his training as a student at the Naval War College, class of '52.

WITHIN A FEW DAYS another announcement was made, that the Honorable Paul Nitze was moving up the ladder from the post of Secretary of the Navy to Deputy Secretary of Defense. Secretary Nitze is well known to the Naval War College, having addressed its classes for a number of years.

Illustrious names constitute one of the more noticeable features of the Naval War College. This is true not only of its guest speakers, but of its former students who went on to greatness. Its famous alumni—to name just a few—include Fleet Admirals Nimitz and Halsey, Admirals Spruance, Turner, Kinkaid, Hewitt, Conolly, Sherman, Hall and Kirk.

The presidents of the Naval War College down through the years have been a distinguished group. Currently in this office is Vice Admiral John T. Hayward, USN, whose numerous qualifications include that of a naval aviator, an expert in antisubmarine warfare, and the first admiral to command an atomic task force.

The Naval War College's founder was one of the great naval leaders of the nineteenth century, Admiral Stephen B. Luce. In 1884, when he was a commodore, he urged the Secretary of the Navy to establish a school of naval warfare. It should, according to Luce, teach the subject "as thoroughly as it can be taught outside the stern school of the battlefield."

Before that year was up, the United States Naval War College had been established. Among those who were among the first to realize its value were Navy Secretary Josephus Daniels, Assistant Secretary of the Navy Theodore Roosevelt, and then Captain Alfred T. Mahan and Admiral William S. Sims.

It was at the Naval War College that Captain Mahan did much of his writing on the influence of sea power, thus performing a significant role in shaping military thinking, and history itself.

Under the leadership of Admiral Sims, after World War I, the college expanded and increased its influence. As it became the Navy's highest educational school, many officers eagerly sought the opportunity to take advantage of the NWC's course of study. Additional incentive was created when the Navy Department announced its policy that the majority of higher commands would go to those with Naval War College experience.

This policy apparently became s.o.p., for by 1921 half of the flag officers afloat—and their chiefs of staff—were graduates of the Naval War College.

The value of this NWC training, often a precursor to flag rank, was to be demonstrated over the years. As students at the Naval War College during the 1920s and '30s, many of the officers who were to become senior leaders and strategic planners during World War II received valuable practice in strategic and tactical plan-



ADM Alfred T. Mahan



ADM Stephen B. Luce

COLLEGE

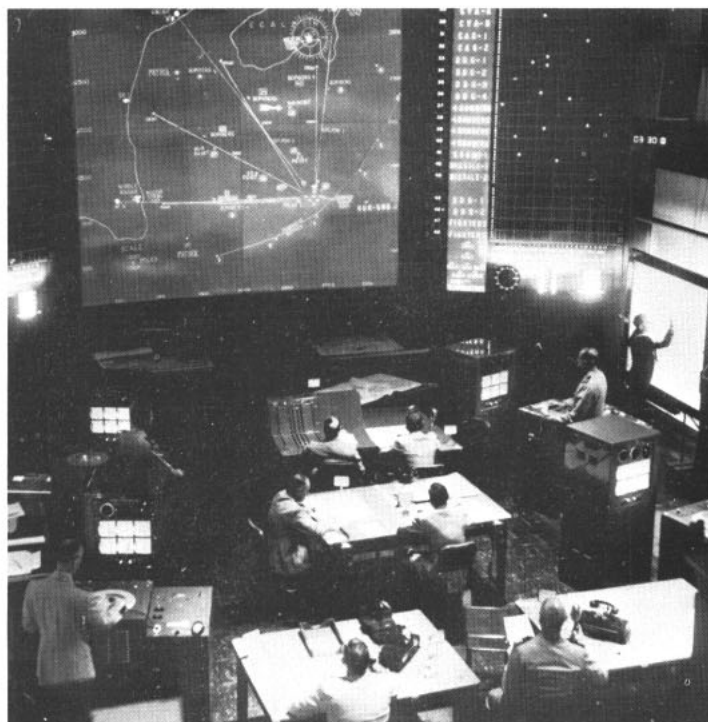
ning during war games of simulated naval operations.

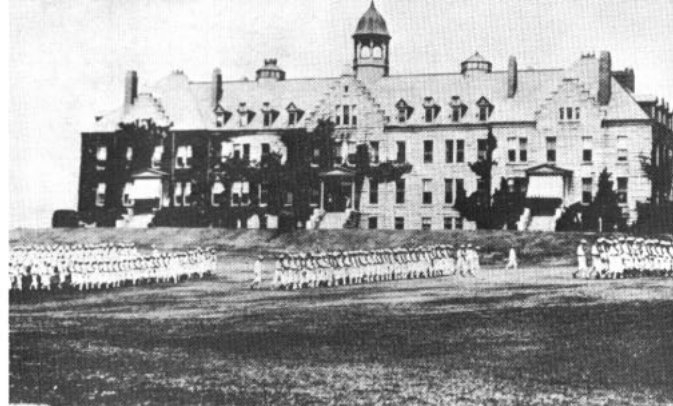
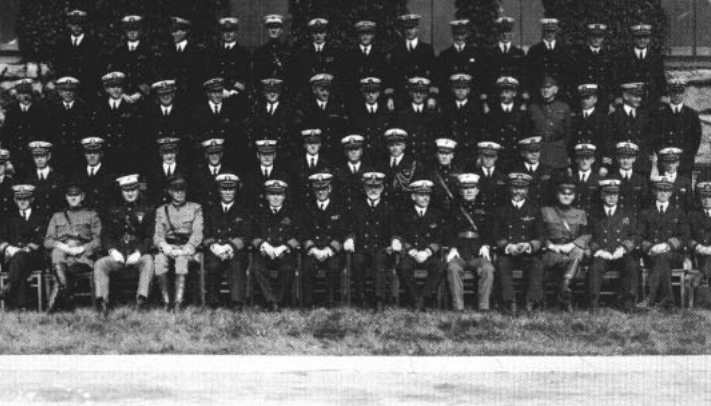
FADM Chester Nimitz, who graduated from the Naval War College in 1923, can be cited as a prime example. In a letter to the war college's president, he stressed the value of the advance preparation and training he had received at the Naval War College:

"... the courses were so thorough that after the start of World War II, nothing that happened in the Pacific was strange or unexpected. Each student was required to plan logistic support for an advance across the Pacific—and we were well prepared for the fantastic logistic efforts required to support the operations of the war.

"When I became Chief of the Bureau of Navigation in June 1939, my first act was to send for the BuNav war plans. To my horror, I learned that on D-Day, it was planned to close down the Naval War College and the Naval Postgraduate School in order to provide officers for an expanding Fleet—as was done on D-Day for World War I.

"I immediately canceled those plans and prepared





MANY NAVY leaders have trained at NWC. Here's class of '23. Can you find Chester Nimitz? Rt: Luce hall in 1920.

for expanded classes at both the war college and post-graduate school. We shortened the War College Course to five months in order that more officers could be rotated through our fine institution. . . . Again, I credit the Naval War College with giving me the wisdom and foresight to see the need for these important changes in our personnel war planning."

UNDER THE LEADERSHIP of ADM R. A. Spruance following World War II, NWC courses were established which acquainted the War College's students with the fundamentals of interservice operations and some of the non-military elements of national power.

Today, the subjects studied at the Naval War College range from national strategy to naval weapons. Strategy, tactics, and logistics are stressed; however, they are not taught as separate subjects, but as related influences on the conduct of war.

Thus, the NWC in 1967 attempts to make certain future naval leaders will have a broad professional understanding of national security, with the accent on seapower. In other words, the War College teaches what every admiral should know.

Since its very beginning, the aim of the NWC has been to prepare naval officers for better things to come. Its founder called it simply an invitation to officers to meet together and prepare themselves for the "... highest and most responsible . . ." duties open to a naval officer. For 83 years, it has been doing just that.

PHYSICALLY, the Naval War College consists of a group of buildings overlooking Narragansett Bay. The oldest War College building, Luce Hall, was built in 1892. It is, of course, named for the Naval War College's founder.

An annex to Luce Hall is the Mahan Library, named after the second president of the War College, Captain Alfred Thayer Mahan. The library annex was added in 1904.

In 1934, a west wing was added to the building complex, and named Pringle Hall, after Rear Admiral J. R. Poinsett Pringle, the 19th War College president.

Sims Hall, situated some distance away, was converted to War College use in 1947, and contains the war gaming annex, completing the list of major buildings.

THERE ARE THREE resident courses offered at the Naval War College, each aimed at a different level of knowledge and experience. All last 10 months.

The School of Naval Command and Staff conducts a

course of instruction for mid-career U. S. officers, i.e., officers in the rank of commander or lieutenant commander with 10 to 15 years' commissioned service. Approximately 160 naval officers attend each year. Officers of the other services are of equivalent rank, and number about 43.

Their course consists of three major studies. The first, Fundamentals of Strategy Study, gives them a background in international affairs, national security, public affairs, economics, and Department of Defense management techniques.

Naval Operational Planning, the second study, examines the military planning process and how it applies to naval warfare.

The third major study consists of two planning exercises, which allow for practical application of just-learned skills and knowledge. Students also engage in an associated elective program and tackle an individual thesis or group research project. Some of these research efforts are presented orally to appropriate groups within the college, as well as in written form.

THE SCHOOL OF NAVAL WARFARE is a course for senior U. S. officers. Naval officers in the grades of captain and commander, with 16-23 years of commissioned service, who currently are best qualified for promotion, are selected to attend. They number approximately 104. Officers from the other services, and civilians from U. S. government agencies are of equivalent rank and experience. About 56 attend each year.

Three related studies constitute the main body of their instruction.

The National Strategy Study includes detailed examination of capabilities, political philosophy, and goals of other nations, all of which influence U. S. strategy. Taking these factors into consideration, students try their hand at formulating a national security policy. In fact, student committees act in the role of the National Security Council, formulating their ideas as to what our national strategy should be.

The second part of the course, the Strategic Planning Study, examines the ways national security policy evolves into military planning at the level of the Joint Chiefs of Staff and of the unified and specified commanders.

In the third portion of the course, the Naval Warfare Study, students consider the impact of seapower on achievement of national goals and study ways of adapting the naval service to meet national needs.

Like their mid-career counterparts, the senior of-

ficers at the School of Naval Warfare study associated electives and participate in individual or group research projects.

The Naval Command Course is open to senior officers of the free world navies. Each year, about 30 captains and commanders, specially selected from friendly navies, are invited to attend the Naval War College.

Their curriculum is divided into two concurrent areas of study—seapower, and international affairs.

The seapower study concerns the broad range of naval power, its relationship to army and air force operations, and how it can best be used to achieve the goals of free world strategy. Included are studies of naval aviation, amphibious, submarine, antisubmarine, anti-air, and mine warfare operations.

Naval Operations Planning examines the military planning process and its application to naval warfare.

Two practical exercises allow the senior students to apply their planning knowledge. While these studies are in progress, a writing and speaking program is conducted to give the students practice in research, writing, and speaking.

ALL THESE War College courses have one thing in common—they are largely self-taught.

Each War College student learns by individual initiative. The college provides him with a vast amount of informative and interpretive material on modern warfare, but no official dogma, doctrine, or accepted solution is presented or advocated. The NWC sets no fixed rules by which wars may be conducted, or battles won. The student's search is for guiding principles, rather than correct answers.

Formal study—reading, lectures, and seminars—is complemented by application, including individual dissertations, group research projects, and war games.

The most distinctive study method used at the Naval War College is the operations problem planning exercise, a highly developed form of case instruction. Here, the student is presented a detailed description of a realistic military situation. He then makes an estimate, develops a plan, and writes an appropriate directive. In some cases, plans are required for opposing sides, and a war game is used to test the wisdom of the courses of action decided on by the student planners. The command level of the situation can range from a small task force to a whole theater of operations. Small-scale problems are solved on an individual basis, while the larger ones are undertaken by groups of students formed into staffs.

Every operations problem is followed by a critique, in which salient features of the problem and significant differences in the possible solutions are discussed. Each student can thus evaluate the soundness of his judgment in preparing his plan.

MANY STUDIES are made the subject of seminars. From readings and lectures, the participants acquire a common background of knowledge and then they are formed into small groups to analyze and discuss the subject in greater detail.

In at least one respect, the student at the Naval War College is like his counterpart on any college campus. The preparation of the research paper is far from popular. Yet, by the time papers have been submitted



PRESIDENTS TOUR—Eisenhower talks with VADM Austin at the college. Late J. F. Kennedy tours with Allen Dulles and John McCone.

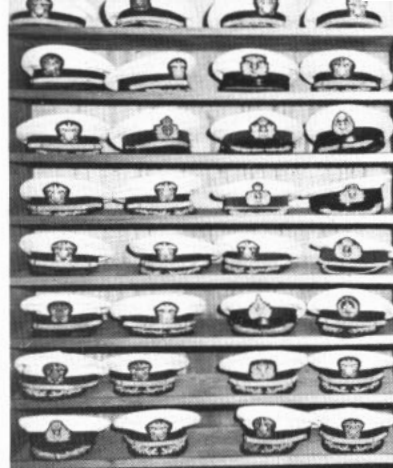


WAR COLLEGE VISITORS—ADM Arleigh Burke (Ret) and former CNO ADM David L. McDonald (Ret) greet foreign guests at the college.



EX-SECNAV Paul Nitze, Deputy SecDef, tours War College with VADM Haywood, RADM Schneider and new CNO, ADM Thomas H. Moorer.





FOREIGN NAVYMEN become familiar with the warfare simulator equipment. Hats (right) reflect nations involved.



STUDENTS assemble to hear various noted speakers before breaking up into small discussion and study groups.

Naval War College Review

Although not every officer can attend the Naval War College, there are ways he can benefit from the attendance of his colleagues. So that officers of the services may share some of the benefits of the resident students at the Naval War College, many lectures and research studies are reproduced and disseminated in a monthly publication entitled *Naval War College Review*.

The first of a series of "blue books" was published in 1901. These international law texts are written by the occupants of the chair of International Law during their residence at the War College. The blue books are printed by the Government Printing Office, and receive worldwide distribution. They are essentially case studies, with emphasis placed on those aspects of international law which are of particular interest to naval officers.

A Guide for Professional Reading for Officers of the Navy and Marine Corps is prepared annually by the Naval War College and published and distributed by the Bureau of Naval Personnel.

and evaluated most students agree that in no other way could they have gained such insight into the strategic or professional subject they selected for study.

Like any other college, NWC relies heavily on an experienced faculty to channel self-study efforts of its students in the right direction.

The Naval War College's faculty includes military officers of all the services and civilian professors. The military faculty is selected to insure a balance of experience in the various military areas. In certain instances, postgraduate education is a prerequisite for faculty assignment. Similar experience is equally sought in the faculty's Army and Air Force officers. Military faculty members normally complete a three-year tour of duty.

The role of the NWC faculty is to provide necessary guidance when it is needed—and not before. In many cases, faculty members allow students and student committees to make mistakes, to march boldly up blind alleys—but then point out errors and oversights before the frustration index approaches the danger point.

ONE OF THE MAJOR CONTRIBUTIONS of the naval War College to the Navy was the development and refinement of the art of war gaming to test the wisdom of military decisions and operational plans.

The first war game problem was conducted at the Naval War College in 1894. Back in those days, war games were conducted with ship models which were moved about on checkerboard floors.

Unfortunately, the checkerboard type of game required that players spend much of their time waiting, while their moves were evaluated by control teams. But this early method of gaming had a more significant drawback—it was suited only to the simulation of surface action. It could not be adapted successfully to fast-moving air and subsurface action.

This drawback no longer exists. The war gaming facility has now gone electronic, and is housed in a wing of its own in Sims Hall. Called the Navy Electronic Warfare Simulator (NEWS), it provides war-gaming services both to the college and to the Fleet.

NEWS provides the War College students with a reproduction of actual battle situations. And it provides the most realistic war game conditions possible.

An installation a block long and three stories high, NEWS consists of equipment rooms, control rooms, an umpire area, and a series of command centers.

It provides the students with an instantaneous and

continuing picture of a tactical situation from the moment of initial contact with enemy forces until one force has been destroyed or rendered ineffective.

NO EFFORT HAS BEEN SPARED to achieve realism. "Admirals" and "commanding officers" of opposing forces are isolated from each other in command centers, where they are supplied only the type of information they would be likely to have in combat. They must make their decisions from limited and often imperfect information—as is, of course, the usual case in real life.

Images of each simulated force are portrayed on a 15-foot master plot screen through the use of optical projectors. NEWS provides extensive communications systems, as well as force radar presentations. It indicates course, speed, and in the case of aircraft or missiles, altitude of the various elements.

Umpires are located in an auditorium which is physically separated from the command center. Each umpire is an officer with wide professional experience in the type of operation he umpires.

To avoid tedious waiting periods, game time can be stepped up to two, four, or even 40 times the normal clock time. While games are being conducted, control teams and spectators can follow the maneuvering and action of opposing forces as portrayed on the master plot screen in the umpire area.

If at any time the action tends to drag, the control teams can inject new information into the game to intensify the problem.

AFTER THE GAME is completed, Monday-morning quarterbacking begins. The decisions made by the players can be evaluated. During the critique sessions, NEWS can recreate electronically the situation at any point of the game. Opposing moves can therefore be analyzed in detail, and players can see for the first time how their forces looked at each stage of the game. Understandably, war-gaming is a popular part of the War College curriculum.

An important "extra" for the War College students is provided by the lecture program, which is conducted throughout the academic year.

Speakers cover such subjects as the progress of science and military affairs and national strategy.

While many lectures are presented by the faculty, the Naval War College invites guest speakers who are leaders in military, academic, and governmental fields.

These sessions have proved so successful that many students stop in to listen as spectators. As a result, the conferences have moved from the smaller lecture rooms into the auditorium.

The academic year is concluded with a week in which students and staff are joined by prominent civilian leaders, high-ranking military officers, and senior reserve officers, for a series of discussions concerning global strategy.

This year, the 19th of these Global Strategy discussions was conducted, with over 600 leaders taking part in the four-day meeting.

As we have seen, many of the Navy's top names had gathered at its highest educational institution to discuss the conduct of war. And that's the way Commodore Luce planned it.

Other Courses at NWC

In addition to the three resident courses mentioned, the Naval War College also conducts several collateral courses during the year. These are:

The Senior Reserve Officers' Course—During the latter part of the academic year, selected senior Reserve officers on two weeks' active duty study current concepts and latest developments in naval warfare.

The Reserve Officers' Command and Staff Course—Selected Reserve officers of the grade of lieutenant commander and major on two weeks' active duty examine the military planning process; operational naval staff organizations, procedures and techniques; major aspects of current and future weapons employment; factors which might influence naval operations in an area of strategic importance; and the techniques employed in the Cold War. Also during the latter part of the academic year.

The Naval Reserve Officers' School Instructors' Seminar—A two-week course conducted each summer which prepares Reserve officers to become instructors in selected correspondence courses at various Naval Reserve Officers' Schools throughout the U. S.

Fleet War Gaming Course—conducted each spring to familiarize selected Fleet officers with war gaming and its application to naval warfare and Fleet operations.

Correspondence Courses—available to all officers of the U. S. military services and the Coast Guard of the grade of lieutenant and above on active service, or in the inactive Reserve. Courses are also available to selected government employees of the grade of GS-10 or equivalent and above. A waiver of rank or grade requirement may be granted for qualified individuals of lower grades.

NAVAL STUDENTS listen as their instructor offers a critique of their individual theories and presentations.





NATIONAL WAR COLLEGE offers 10-month course on national security policy to top military and civilian officials.



Additional Opportunities For Senior Officers—

'THINK

THE STORY of the Naval War College has been told in some detail in the preceding pages. However, this is not the only institution devoted to the furtherance of advanced education for naval officers.

Each of the military services maintains at least one similar college, and each is available to a limited number of naval personnel.

Below you will find a brief description of these schools.

The National War College was founded to meet two requirements revealed by the experience of World War II: The need for greater understanding between the civilian and military branches of the government, and for greater understanding of the military services themselves.

The National War College operates under the direction of the Joint Chiefs of Staff. It is a top-level interservice school for highly selected senior military officers and civilian career officials, giving particular emphasis, at the senior school level, to the field of politico-military affairs. One of the important aspects of the course is the exposure of class members to experiences and viewpoints of the civilian representatives as well as those of the members of the other military services. The academic program encompasses a systematic study of the nature, formulation and implementation of national security affairs.

Classes usually consist of about 140 students, with 35 members from civilian agencies of the government and the remainder equally divided among the three military departments. The average age of all members is 43 years. Military members are in the grade of captain or commander in the Navy, or colonel and lieutenant colonel in the other services. Civilian members are of comparable rank. The faculty consists of about

22 military and foreign service officers and civilian educators.

The academic atmosphere is roughly comparable to that of an advanced graduate educational institution for mature military men and statesmen. The annual course is 10 months long.

The National War College is located at Fort Lesley J. McNair, Washington, D. C.

The Armed Forces Staff College, Norfolk, is primarily concerned with the preparation of selected military officers for duty in all echelons of joint and combined commands.

Each class is composed of approximately equal numbers of officers from the military departments. Students are officers with from nine to 20 years' service who have demonstrated their suitability for higher command or staff training. In addition, a small number of civilian students from other government agencies and several allied officer students are invited to each class.

Two major areas of study are covered: Joint and combined organization, planning and operations; and related national and international security considerations.

Seminars, with 12 to 18 students, include members from the three military services with allied and civilian students. Three faculty officers, one from each of the military departments, are detailed to each seminar as permanent advisers.

Emphasis is placed upon methods and principles, particularly upon improving habits of thought and developing the ability to analyze, reason and reach decisions.

The atmosphere is that of a graduate-level educational institution. Students do not receive academic grades, the attitude being that competition for marks might jeopardize full and free expression.

The Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, D. C., is a joint educational institution operating under the direction of the Joint Chiefs of Staff. It is the capstone of the military educational system in the management of logistic resources for national security.

The College consists of three schools: The resident school, the national security seminar school, and the correspondence school. The staff and faculty are composed of members from the Army, Navy, Air Force, and Marine Corps, supplemented by civilians who are specialists in their subjects.

The enrollment and allocation of student quotas for the resident course is determined by the Joint Chiefs of Staff. U. S. and foreign nationals are enrolled in the correspondence course on an individual basis. The Commandant determines military quotas for the seminar course.

The subjects covered in the resident course range over the entire field of national security affairs, but attention is focused on the management of resources, in dealing with the problems of national security. The central theme is the management of logistic resources,

TANKS'

material, programs and systems of combat threats and challenges to the security of the U. S. The course stresses the study of the national economy, especially its industrial sector, and of science and technology, as essential sources of national strength.

Based on the resident course, seminars are presented each year in selected cities throughout the United States. They consist of two five-day weeks of approximately six hours daily. Civilian participants are from the community. Reserve officers who wish to attend the seminars apply through local official channels to their respective commandants. Upon selection, the Reservists are ordered to active duty for the period of instruction.

The graduate level correspondence course "National Security Management" presents the subject matter of the resident curriculum, adapted to the correspondence method of study. The course is not designed to train specialists in any particular field, but to provide a deeper appreciation of the management of logistic resources. More than 25,000 students have completed the course which takes from 12 to 15 months.

The Army War College, Carlisle Barracks, Pa., prepares selected senior officers for command and high level staff duties with emphasis on Army doctrine and operations.

The focus of the curriculum is placed on the appropriate use of military force, with emphasis on the Army, in support of national security policy. Primary emphasis is placed on the considerations and methods of developing and employing military force, through the formulation of strategic concepts and basic undertakings, to support the national strategy.

Eight courses, two programs and two seminars are presented. The orientation program provides a basic

introduction to the college and the curriculum. The comparative military strategy seminar establishes the foundation for understanding the evolution of military strategy to permit evaluation of current and future strategies. An appreciation of current Department of Defense problem-solving and decision-making procedures is offered by the command and management seminar.

Each course is designed to contribute to the considerations required for the development of a sound national strategy.

The individual research program emphasizes research and analysis in depth, preparation of a professional paper and speaking on a military subject of importance to the Army.

The Army Command and General Staff College, Fort Leavenworth, Kan., provides officers with a working knowledge for war- and peacetime duty as commanders and general staff officers at division, corps, field army and army group levels. It provides the basis for future progress to higher command and staff responsibilities.

A partial description of the scope of instruction would include: Fundamentals of combat, including principles of war; fundamentals of leadership; legal basis of command; international law; management control techniques, including automatic data processing systems; elements of national power, and strategic area studies.

Prominent military and civilian guest speakers lecture on selected topics to support and extend the resident instruction.

The course is 38 weeks long. Naval officers selected for this instruction must have from 10 to 15 years of commissioned service.

At the **Air Command and Staff College**, Maxwell Air Force Base, Ala., a 39-week resident course is held once a year. The 1967 course included approximately 600 officers, predominantly USAF, but also some members of the other U. S. military services, allied nations and civilians. U. S. personnel consisted of senior captains or majors, or civilians of equivalent grade. A limited number of USAF officers were from the Air National Guard or the Air Force Reserve components.

LOCATIONS of ICAF Seminars are discussed by COL Charles Sullivan, Director of Seminar School, and RADM J. J. Appleby, Deputy Commandant, Industrial College.



The College is dedicated to the proposition that the career of an Air Force officer is a profession requiring certain knowledge, skills and attitudes in its members.

Its curriculum deals with the principles and concepts related to the maintenance and employment of aerospace power. Instruction is designed to broaden rather than specialize the knowledge of officers at the level of complexity appropriate to their grade and experience. At the same time, opportunities are provided for a student to increase competence in his individual career field.

Four primary areas are considered in the sequence of



STUDENT USES pencil to emphasize a point during study session at the Industrial College of the Armed Forces.

instruction: military fundamentals; military management; military environment; and military employment.

The final phase closes with a study of U. S. Air Force long-range objectives through an analysis of the document: "USAF Planning Concepts: 1966-1980."

The Air War College, Maxwell Air Force Base, Ala., prepares senior officers for high command and staff duty. It is the senior professional school in the U. S. Air Force educational system. Its student body is composed of a highly selected group of men with widely diverse backgrounds who are brought together for graduate study.

The objectives of the course of instruction are to: Gain a more complete understanding of international

relations, the nature of conflict, the essential elements of strategy, sound employment doctrine, and integrated staff responsibilities; further develop an appreciation of the current problems of national defense; develop a comprehensive understanding of the capabilities and limitations of all warfare systems in support of national policy; expand the student's capability to develop sound solutions to problems and to project them more effectively.

The course is 10 months long. Naval officers selected for this instruction are in the year groups with 16 to 21 years of commissioned service.

The Marine Corps Educational Center includes the Marine Corps Command and Staff College and the Marine Corps Amphibious Warfare School, both of which are located at Quantico, Va.

The Marine Corps Command and Staff College provides professional education to selected officers to prepare them for command at the regiment/group level; for staff duty at the division/wing and higher FMF levels; and for duties appropriate to the grade of lieutenant colonel and colonel with departmental, combined, joint and high-level service organizations.

The course of instruction is presented in the setting of a field grade officer's workshop, emphasizing situations requiring the student to solve problems of the type he can expect to encounter in service both in and outside the FMF.

Formal instruction is primarily of the integrated problem type, requiring individual or group application. The course stresses planning for the conduct of force-in-readiness operations in cold, limited, or general war and in all phases of counterinsurgency. Work is undertaken in the area of political-military theory, foreign policy, treaty obligations and mutual defense agreements, and the capabilities and limitations of allied and other foreign military forces. Rounding out the course is a program of required reading and book discussions.

The course is 42 weeks long. Officers of other services with the rank equivalent to lieutenant colonel and colonel in the Marine Corps are eligible to attend.

The Marine Corps Amphibious Warfare School provides professional education for selected Marine Corps officers to prepare them for the duties of a field grade officer in the FMF, as well as command at the battalion/squadron level and staff duty at the regiment/group level.

Primary emphasis is placed on command and staff duties in Marine ground and aviation units in amphibious operations. The instruction is at the level of the reinforced infantry battalion and regiment and the aircraft squadron and group. Instruction is presented on the modern military techniques of supply material maintenance and fiscal management, with particular reference to the FMF. Background instruction is presented on related subjects of national, international, or political-military significance. Considerable emphasis is placed on improving individual ability in writing and speaking, and developing an ability to converse in French or Spanish.

The course is 42 weeks long. Marine Corps majors and captains, and officers of other services of equivalent rank are eligible.



WHERE TO LOOK FOR INFORMATION ON EDUCATION

IN RECENT YEARS, Navymen have been encouraged, whenever possible, to avail themselves of the educational opportunities offered by the Navy.

The reason is simple: The man who develops educationally also develops professionally and that's the kind of man the Navy needs.

The Navy looks forward to the day when its career designated enlisted men will have at least two years of college or an associate degree, other enlisted men will have completed high school or have a GED equivalent, and all commissioned officers will have a baccalaureate degree.

To implement Navy policy concerning in-service education, commanding officers are directed by BuPers Notice 1560 of 22 August to appoint an Educational Services Officer in accordance with Art. D-2103 of the *BuPers Manual*.

Commanding officers will also ensure that all active duty personnel are interviewed by a member of the education staff upon completion of their initial training at their first permanent duty station. Their educational background will be reviewed and they will be counseled on their educational development. They will be told of the educational opportunities available in the Navy, including methods of securing credit from civilian educational institutions for military schooling and experience.

In addition, everyone will be interviewed within 30

days after a permanent change of station assignment to a new duty station, and advised of the educational opportunities available at that station.

To assist both in the administration of educational programs and to provide the authority for conducting those programs, the Bureau of Naval Personnel has published a new *Educational Services Manual* (NavPers 15229), which has recently been distributed to all ships and stations.

The first portion of the *Manual* is devoted principally to administrative procedures.

The discussion of educational opportunities available to Navy personnel provides in Chapter IV an explanation of the Veterans Readjustment Benefits Act of 1966 (Public Law 89-358). You probably know it better as the Cold War GI Bill, which was signed into law by the President in March 1966.

The *Manual* moves on to the Tuition Aid Program in Chapter V. This program is designed to provide financial assistance to eligible Navymen who participate in off-duty educational programs at Navy-approved institutions. Authorized by Public Law 89-687 of 15 Oct 1966, Tuition Aid has recently been subjected to changes which permit payment of a straight 75 per cent of tuition costs. However, because funds for fiscal year 1968 are limited, students are encouraged, if eligible, to take advantage of the GI Bill.

The Instructor Hire system is discussed in Chapter

Naval Officers Study in Foreign Institutions Too

IN ADDITION to the Navy's participation in a number of armed forces service colleges within the United States, U. S. Navy officers are enrolled in a variety of foreign service colleges. As in the case of our own service college enrollment, lieutenant commanders and junior commanders attend the junior courses while senior commanders and captains normally are enrolled in the senior colleges.

In general, the objectives realized from assigning naval officers to these colleges are:

- Increased knowledge of current developments in other services;
- Promotion of international goodwill; and
- Presentation of the U. S. Navy point of view in schools of other services.

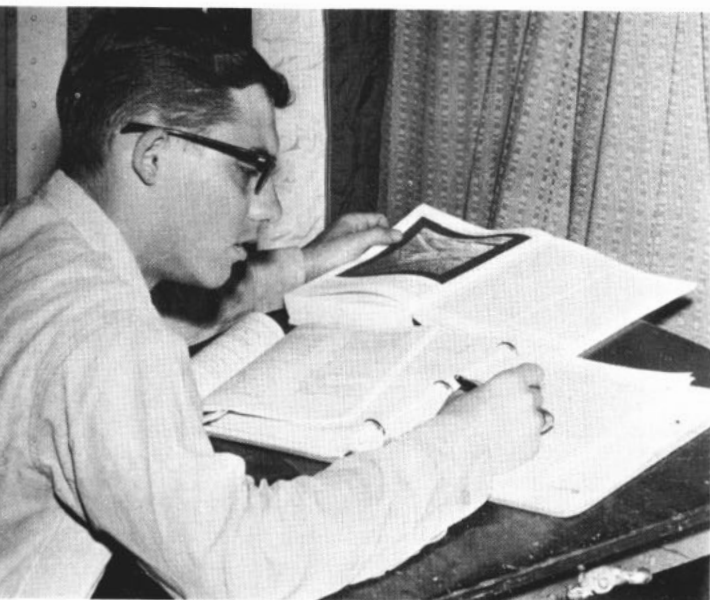
Most of the Navy's foreign service college students attend schools in Europe, including four colleges in the United Kingdom. The Royal Naval Staff College, in Greenwich, England, and the Royal Air Force Staff College, in Bracknell, England, each having a study term of one year's duration, offer junior courses; the six-month Joint Service Staff College, in Buckinghamshire, and the one-year Imperial Defence College, in London, are senior courses. The former are similar to our Armed Forces Staff College while

the latter two are equivalent to our National War College.

Elsewhere in Europe, the Navy sends officers to attend one-year courses at the German Command and General Staff Course, in Hamburg; the Spanish Naval War College, in Madrid; and the French Naval War College, in Paris. One Navy captain and one Marine Corps colonel are also sent to the NATO Defence College, in Rome, Italy, to attend a six-month course established to train senior officers and key civilians of the NATO countries to fill important posts in NATO or in positions within their own national governments dealing with the NATO alliance.

Naval officers are also enrolled in one-year courses at the Canadian National Defence College, Kingston, Ontario, and the Indian National Defence Services Staff College, Wellington, India.

Finally, the Navy sends officer students to the nine-month course at the Inter-American Defense College, Fort Lesley J. McNair, Washington, D. C. This course is attended by both military personnel and civilians from a number of North American, Central American and South American countries.



CORRESPONDENCE courses help Navy men to advance.

VI of the *Manual*. It addresses itself primarily to administrative details, but it does tell the inquirer just what instructor hire is, and how it may be used. As the name suggests, the program supplies funds to employ teachers. These teachers may conduct credit or non-credit courses at all educational levels.

PACE, the Program for Afloat College Education, is covered in Chapter VII. This program is the product of the cooperation of the Bureau of Naval Personnel with several universities and colleges to administer accredited undergraduate college courses to qualified Navy men serving on active duty aboard selected ships or at an isolated station.

PACE is open to all active duty Navy men who are recommended by their commanding officers. They must, however, be serving in a ship or at an isolated station where PACE is being offered.

The chapter also lists the ships which are participating in the PACE program, as well as the planned dates when other type commanders will be included.

The *Manual's* eighth chapter is devoted to correspondence courses and testing sections. It discusses the United States Armed Forces Institute, which provides the General Educational Development (GED) tests, Comprehensive College Tests, and correspondence courses. More than 200 correspondence courses are currently offered by USAFI and cover pre-high school, high school, college and technical subjects.

The only cost to the Navy man for these USAFI courses is a five-dollar entrance fee. After this first payment, there is no further cost provided his progress is satisfactory.

The final chapter of the *Manual* is concerned with foreign language study.

Each chapter which describes a Navy educational program also contains information relating to the administrative procedures to be followed by individual commands.

The 10 appendixes also contain a wealth of administrative information, forms and sample letters.

AS HAS BEEN STATED many times in this issue, the Educational Services Officer is the man to see if you are seeking to increase your present fund of knowledge or raise your level of training. However, it might also be useful to know where you can find the official word on the program in which you are interested.

As is true of any Navy subject, you can find most of the information you need in Navy manuals, and in related Navy directives.

For instance, Chapter D, *BuPers Manual* (NavPers 15791A), contains general information on officer and enlisted training, the use of training aids, and correspondence courses.

The *Transfer Manual* (NavPers 15909) may also be of interest. Chapter 11 describes the nuclear power training program, prescribes eligibility requirements, and gives instructions on how to apply. Chapter 12 deals with service schools, and describes basic requirements and pertinent transfer policies.

For more detailed information concerning BuPers-sponsored schools, you should consult the *Formal Schools Catalog* (NavPers 91769G). It lists "A," "B," "C" and other schools, giving location, course length, prerequisites, and other valuable information. But remember, this is not the complete list of Navy schools; there are catalogs prepared by BuMed, the Chief of Naval Air Technical Training and the Fleets.

Of interest also is the *Educational Services Manual* (NavPers 15229), in which you can find details con-



IT FITS—George G. Madsen, USN, who today is an LTJG in the Philippines, is shown here in 1964 when Chief Yeoman Madsen became Ensign Madsen.

cerning the complete educational services program. Written primarily for the use of the Educational Services Officer, it contains information concerning the use of Tuition Aid and the GI Bill for your off-duty studies, as well as details on PACE, Instructor Hire, and foreign language study. It also contains information on USAFI courses, but for a complete list of available USAFI courses, you should see the *USAFI Catalog*.

For a list of Navy correspondence courses, on the other hand, the *List of Training Manuals and Correspondence Courses* (NavPers 10061) is what you need. It gives a complete rundown on enlisted correspondence courses, officer correspondence courses, and those little (and not-so-little) blue books, the training manuals.

Often, of course, such manuals are not quite detailed enough to give you all the information you need to start you on the road to knowledge. In such cases, there are Navy directives available which will give you step-by-step guidance concerning a given program or opportunity. Although not a complete list, here are some of the important directive series which are not covered elsewhere in this issue. Also, see the articles on individual programs in which you are interested.

ADCOP—Associate Degree Completion Program—
BuPers Note 1500.

Air Reserve summer accelerated training program—
BuPers Inst 1571.23.

Aviation Officer Candidate program—OpNav Inst
1500.23.

Aviation support equipmentman training program—
OpNav Inst 3500.26.

Blue and Gold program (Naval Academy)—BuPers Inst
1531.5.

College degree program for officers—BuPers Inst
1520.98.

Contract NROTC program—BuPers Inst 1533.69.

Defense language program—BuPers Inst 1550.41.

Fleet war gaming course—OpNav Inst 1541.2.

Helicopter pilot training—OpNav Inst 3740.2.

Hospital corpsman "A" school—BuMed Inst 1510.11.

Interservice education and training—BuPers Inst 1500.24.

Medical educational program—for officers—BuPers
Inst 1520.101.

Naval Academy appointments—BuPers Note 1531.

Naval War College—OpNav Inst 1520.12.

Navy Enlisted Dietetic Education program—BuPers Inst
1120.38.

Navy Enlisted Nursing Education program—BuPers Inst
1120.37.

NESEP—Navy Enlisted Scientific Education Program—
BuPers Inst 1510.69.

NROTC—BuPers Note 1530.

Nuclear power training—for officers—BuPers Inst
1520.88.

Officer Candidate School—OpNav Inst 1530.5.

Postgraduate education program—BuPers Note 1520.

Pre-active duty training for Reserve enlisted men—
BuPers Inst 1510.88.

Precommissioning training for submarine personnel—
OpNav Inst 3500.25.

Scholarship acceptance, requirements for active duty
personnel—SecNav Inst 1500.4.

Schools and courses available to medical and dental
personnel—BuMed Inst 1510.9.



Jean Alice Szymanski, USN, the first Navy woman to graduate under the Navy Enlisted Scientific Education Program (NESEP) is now an LTJG on duty at the Naval Air Development Center, Naval Air Facility Johnsville, Pa.

SCORE—Selective Conversion and Retention program—
BuPers Inst 1440.27.

Selective Electronics Training program—BuPers Inst
1510.104.

STAR—Selective Training and Retention—BuPers Inst
1133.13.

Skydiving training—SecNav Inst 1700.6.

Student quotas for air technical training schools—
OpNav Inst 1510.7.

Submarine school for officers—BuPers Inst 1520.6.

Test pilot schools—BuPers Inst 1331.3.

Undergraduate education program—for officers—
BuPers Inst 1520.97.

NAVY TRIES to provide PG education to line officers
completing obligated service or first cruise of service.



TAFFRAIL TALK

FOR THE NEXT FEW MONTHS, it won't do much good to talk about education, training, schools, or even co-eds to an ALL HANDS staffer. He'll probably play dumb.

The creation of any special issue is a painful experience, and this education issue was no exception. It took several months to gather the material which forms the Navy's education story. For helping to provide the information, we are grateful to the Education and Training Divisions, and other divisions in BuPers whose members went out of their way to be helpful.

If the issue is helpful to you at all, a tip of the mortarboard is due to several people whose talents—and toil—went into its 64 pages. The names of some of the plaudit-earners follow.

Now back from duty overseas and on his second tour as an ALL HANDS newswriter, Chief Journalist Dan Kasperick knows his way around Washington and the Navy Department, which helped him find educational people to ask educational questions. An assignment with Commander in Chief Pacific preceded this ALL HANDS tour.

Chief Journalist Marc Whetstone is a veteran Navy writer. An ex-carrier sailor, he knows the Vietnam theater well and spent considerable time in the South China Sea aboard USS *Kearsarge* (CVS 33). His *Kearsaga* won seven CHINFO merit awards and one DOD award during his tenure as editor.

Our civilian newswriter, Bob Neil, is an ALL HANDS old-timer. A graduate of Phillips University, in Oklahoma, he has been writing military prose with a salty slant for more than 10 years.

After majoring in English for a year at Geneva College, in Pennsylvania, Journalist First Class Jim Teague decided to try Navy life, and apparently found it to his liking. His byline has appeared in numerous Navy publications ever since. You'll recognize his work by the excellent (and difficult) combination of humor and information.

Our layout man and feature writer, Journalist Second Class Larry Henry, has as credentials a journalism degree from Southern Illinois University and experience as editor of an industrial publication.

Michael Tuffli, our artist-illustrator, has been turning out imaginative covers and centerspreads for ALL HANDS for nearly four years. He previously worked as illustrator for the U. S. Army Exhibit Unit, and as artist for two civilian corporations.

Michael's good right hand is Seaman Bob Swain, our irrepressible cartoonist. Relatively new to the staff, Bob studied under Fred Lasswell, the cartoonist who produces the Snuffy Smith comic strip, before coming on active duty.

Eddie Jenkins, civilian researcher and proofreader, is a graduate of Columbia University. Before coming to ALL HANDS, he spent several years with the Army's Adjutant General's office. One of his jobs was nitpicking technical manuals.

Keeping the ALL HANDS mail moving is Personnelman Third Class Bob Cooper, formerly of PN "A" school in San Diego. He is a veteran of 18 months in WestPac aboard an APA.

The other names you'll recognize on our masthead. Putting out ALL HANDS is one of our jobs. We're responsible also for *The Naval Reservist*, and the *Navy Chaplain's Bulletin* (the latter in cooperation with the Chaplains Division of BuPers), not to mention handling all that correspondence you thoughtfully send us from the Fleet.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

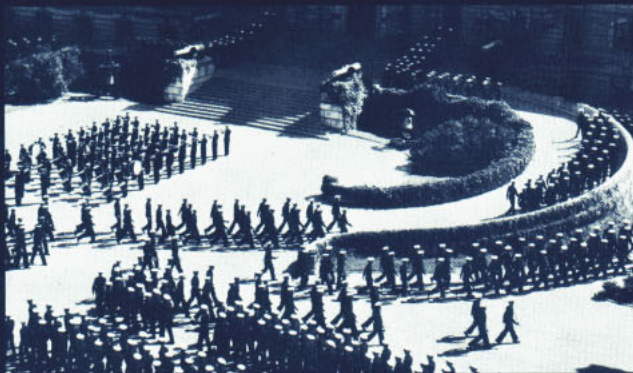
Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington, D.C. 20370.



***SOMETHING TO
CHEER ABOUT...***



**EDUCATION and TRAINING
in the U.S. NAVY**